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Comparison of the Department of the Army, Navy and Air Forces contracting internship programs

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COMPARISON OF THE DEPARTMENT OF THE ARMY, NAVY AND AIR FORCE'S CONTRACTING INTERNSHIP PROGRAMS

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September 2013

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13. ABSTRACT (maximum 200 words)

The Department of Defense has experienced a significant loss of acquisition professionals because of attrition and workforce reductions. Interns have been hired to curtail the loss, but the dwindling number of experienced acquisition personnel has left little time to train the new entrants while still meeting complex mission requirements. In an effort to maintain a professional staff that is qualified to fill critical positions in contracting, the Air Force, Army, and Navy have each created contracting internship programs.

The research purpose is to: (1) identify whether the DoD contracting competencies are covered consistently among the Army, Navy, and Air Force's contracting internship programs (2) determine if and to what extent these defense organizations are incorporating industry best practices into their internship programs and (3) recommend program improvements to ensure consistent coverage of the DoD contracting competencies and that industry best practices are incorporated.

Study results suggest the defense contracting internship programs are not consistent in their coverage of DoD contracting competencies and that each program has best practices that are not fully implemented. Alignment and standardization of the defense internship programs are suggested to ensure consistent coverage of DoD contracting technical competencies and that industry best practices be fully incorporated.

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COMPARISON OF THE DEPARTMENT OF THE ARMY, NAVY AND AIR FORCE'S CONTRACTING INTERNSHIP PROGRAMS

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Submitted in partial fulfillment of the requirements for the degree of

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ABSTRACT

The Department of Defense has experienced a significant loss of acquisition professionals because of attrition and workforce reductions. Interns have been hired to curtail the loss, but the dwindling number of experienced acquisition personnel has left little time to train the new entrants while still meeting complex mission requirements. In an effort to maintain a professional staff that is qualified to fill critical positions in contracting, the Air Force, Army, and Navy have each created contracting internship programs.

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LIST OF ACRONYMS AND ABBREVIATIONS

ACC	Army Contracting Command
ACF	Acquisition Career Field
ACPM	Activity Career Program Manager
ACTEDS	Army Civilian Training, Education and Development System
ACWA	Administrative Careers With America
AFPC	Air Force Personnel Center
AFPOA	Air Force Personnel Operations Agency
AFTE	Air Force Technical Elements
APC	Agency Program Coordinator
AT&L	Acquisition, Technology and Logistics
CAS	Council for the Advancement of Standards
CEIA	Cooperative Education and Internship Association
CFM	Career Field Manager
CP	Career Program
CP-14	Contracting and Acquisition Career Program
CPAC	Civilian Personnel Advisory Council
CPF	Civilian Personnel Flight
DA	Department of the Army
DACM	Director, Acquisition Career Management
DAF	Department of the Air Force
DATE	Department of the Army Technical Elements
DAU	Defense Acquisition University
DAWIA	Defense Acquisition Workforce Improvement Act
DoD	Department of Defense
DoN	Department of the Navy
FAI	Federal Acquisition Institute
FAR	Federal Acquisition Regulation
FPRA	Forward Pricing Rate Agreement
GPA	Grade Point Average
GS	General Schedule

HQ USAF	Headquarters U.S. Air Force
HQDA	Headquarters, Department of the Army
IDP	Individual Development Plan
ITP	Intern Training Plan
KSA	Knowledge, Skills and Abilities
MAJCOM	Major Command
MDP	Master Development Plan
MITP	Master Intern Training Plan
MTP	Master Training Plan
NACC	Naval Acquisition Career Center
NACE	National Association of Colleges and Employers
NADP	Naval Acquisition Development Program
NAIP	Naval Acquisition Internship Program
NEO	New Employee Orientation
NSEE	The National Society for Experiential Education
NTE	Navy Technical Elements
OJT	On-the-Job Training
OPM	Office of Personnel Management
POC	Point of Contact
TAPES	Total Army Performance Evaluation System
TWMS	Total Workforce Management Services

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I. INTRODUCTION

A. INTRODUCTION

This chapter provides a general overview of this research project. The author presents the background, purpose and objective of the research in this introductory chapter. The chapter then describes the primary and subsidiary research questions and the research methodology. Finally, a chapter summary is provided.

B. BACKGROUND

The Department of Defense (DoD) has experienced a significant loss of qualified, competent acquisition professionals due to mandatory workforce reductions, hiring freezes, retirement and opportunities offered in the private sector. Many interns have been hired in an effort to curtail the loss, but the dwindling number of experienced acquisition personnel has left little time for training and mentoring new entrants while still meeting complex mission requirements. The question asked by defense acquisition leadership is how to effectively produce well-trained and technically proficient acquisition professionals. In an effort to produce and maintain a professional staff that is trained and fully qualified to fill critical and key leadership positions in the acquisition workforce, the Departments of the Army, Air Force and Navy/Marine Corps (collectively referred to as defense organizations) have each created separate contracting internship programs to train entry-level employees. The programs are aimed at recent, high-achieving college graduates, veterans, and mid-career professionals. Chapter III of this report provides a comprehensive overview of each defense organizations' internship program; however, the following paragraphs offer a brief description of each.

The Department of the Air Force's internship program to recruit and train contract specialists is called the COPPER CAP Program. COPPER CAP provides full-time civilian employment and performance-based annual promotions while performing three years of various training (on-the-job, web-based, and classroom). Upon completing the intern hiring process, COPPER CAP participants begin at the GS-07 grade level with target grades of GS-11 to GS-12 (Department of the Air Force [DAF], 2013).

The Department of the Army (DA) categorizes its civilian career fields numerically. The contracting and acquisition career field is called CP-14 and consists of four career tracks: contracting, purchasing, industrial property management, and manufacturing and production (Department of the Army [DA], 2013b). CP-14's Contracting and Acquisition Management Development Program is a 24-month long, structured training program that provides motivated individuals an opportunity for accelerated promotions and career broadening assignments in order to: (1) perform effectively at the journeyman level (2) enhance eligibility to enter the Army Acquisition Corps and (3) assume leadership positions within the contracting and acquisition career field.

The Naval Acquisition Intern Program (NAIP), a development program for new entrants into the contracting and acquisition sector of the federal workforce, was established on October 1, 1992, by the Department of the Navy and the Defense Acquisition Workforce Improvement Act (DAWIA). The purpose of the program is to develop skilled professionals to meet projected Navy/Marine Corps acquisition workforce requirements. The NAIP is a three-year training program that offers highly qualified college graduates an opportunity for advancement, regular promotions, systematic development, career broadening assignments, and graduate education (Assistant Secretary of the Navy, 2013). Contracting is one of 11 different acquisitions career fields in which employees can be hired. It is executed for the Director, Acquisition Career Management (DACM) and overseen by the Naval Acquisition Career Center (NACC). NAIP graduates are eligible for permanent, civil service positions with either the Department of the Navy or the Marine Corps to work as contract specialists (Assistant Secretary of the Navy, 2013).

Establishing and maintaining a successful internship program is one of the best approaches an organization can undertake to ensure that current staffing needs are met and to prepare for future workforce requirements. Successful industry internship programs have some best practices in common. Primarily, successful internship programs strive to educate and thus establish measurable learning objectives for the interns. Other best practices include offering compensation and incentives such as flexible work schedules, assigning a mentor, and providing continuous performance feedback to the

interns. Chapter III provides a detailed and comprehensive overview of industry internship program best practices.

Successful internship programs are beneficial to everyone involved, including the interns and the organizations. Internships provide interns the opportunity to learn new skills, explore various career paths, garner valuable work experience, and develop a professional network (Carlson & Halbrooks, 2003). The programs are beneficial to host organizations as well because internships are an excellent way for an organization to evaluate highly motivated potential employees without a long-term commitment. Interns can also provide a fresh perspective and solutions to old organizational issues (Carlson & Halbrooks, 2003).

As discussed above, successful internship programs must sufficiently cover the organization's desired learning competencies. In the case of defense organization's contracting internship programs; this refers to the DoD contracting competencies. Thus, it is important that the DoD contracting competencies are covered consistently among the various defense programs. The background explains how successful internship programs benefit everyone involved and provided some examples of industry best practices. It could be questioned whether the defense organizations' contracting internship programs are currently incorporating industry best practices and to what extent. This research project focuses on these areas that arose from the background information.

C. PURPOSE

The purpose of this research is to:

1. Identify whether the DoD contracting competencies are covered consistently among the Army, Navy, and Air Force's internship programs

2. Determine if and to what extent these defense organizations are incorporating industry best practices into their internship programs and

3. Recommend program improvements to ensure consistent coverage of the DoD contracting competencies and that industry best practices are incorporated.

D. RESEARCH QUESTIONS

The questions below were developed to guide the research. A desired outcome of this project is to answer the following primary and subsidiary research questions:

1. Primary Research Questions

a. How consistent are the Army, Navy and Air Force contracting internship programs in their coverage of DoD contracting competencies?
b. To what extent have the Army, Navy, and Air Force contracting internship programs incorporated industry internship best practices?

2. Subsidiary Research Question

a. What aspects of the defense organizations' contracting internship programs can be improved to ensure the programs are consistent and that industry best practices are incorporated?

E. RESEARCH METHODOLOGY

Research for this thesis began by investigating the Department of Defense Contracting Competency Model, which is the foundation of the contracting competency requirements for the DoD's acquisition workforce and other government organizations. Information was also collected on the Department of the Air Force's COPPER CAP Program, the Department of the Army's Contracting and Acquisition Management Development Program, and the Navy/Marine Corps' Naval Acquisition Internship Program in terms of each program's structure and coverage of DoD contracting competencies. Research for this thesis also consisted of performing a literature review to gather information on industry internship programs, industry associations, and industry internship program best practices.

The reports, data, and information collected were analyzed and culminated into a comparative analysis of the Army, Air Force, and Navy/Marine Corps' contracting internship programs. The objectives of the comparative analysis are to (1) determine if DoD contracting competencies are covered consistently among the various defense programs (2) measure the degree that industry best practices are currently incorporated into defense organization internship programs and (3) to recommend program improvements.

F. ORGANIZATION OF REPORT

This thesis is organized into five chapters: Introduction, Literature Review, Defense Internship Programs, Comparative Analysis Results, and the final chapter Summary, Conclusion, and Areas for Further Research. A brief synopsis of each chapter is provided.

Chapter I (Introduction) discusses the purpose of this study, provides background information, describes the research methodology, presents the primary and subsidiary research questions, and explains the organization of the report.

Chapter II (Literature Review) details the results of the literature review. It discusses how internships differentiate from other experiential learning opportunities and how an internship is traditionally defined in private industry. The chapter also presents the benefits of internship programs to the participants, the sponsor organizations, and industry as a whole. The core principles and best practices used in private industry internship programs are also introduced.

Chapter III (Defense Internship Programs) presents a comprehensive review of the defense organizations contracting internship programs. The chapter details (1) the Department of the Air Force's COPPER CAP program (2) the Department of the Army's Career Program CP-14 Contracting Career Intern Program and (3) the Navy/Marine Corps' Navy Acquisition Internship Program. The discussion provides information on specific focus areas of each program in correlation with industry best practices presented in Chapter II. Chapter III also discusses the DoD contracting competencies that contracting interns are required to possess prior to graduation. In Chapter IV, the information is used to analyze each DoD internship program in comparison to DoD contracting competencies and industry best practices identified in the literature review.

Chapter IV (Comparative Analysis Results) provides a comparative analysis of the defense organizations' contracting internship programs to DoD contracting competencies and to best practices of private industry internship programs identified in the literature review. The objective of the comparative analysis is to determine if there are any inconsistencies between each program's coverage of contracting competencies

and to determine the degree that industry best practices are currently incorporated into the defense organizations' internships.

Chapter V (Summary, Conclusion, and Areas for Further Research) summarizes the research, provides the author's conclusion, and presents areas for further research.

G. SUMMARY

The complex nature of contracting and acquisition for the Department of Defense requires training experiences that are challenging, comprehensive, tangible and directly related to achieving proficiency in the contracting career field. Ingraining contracting personnel with the knowledge and skills needed to complete the mission continues to be a significant challenge for the Department of Defense. Acquisition leadership relies on contracting internship programs to provide the experiential learning and training experiences needed to decrease competency gaps and increase technical proficiency in its contracting interns. Defense organizations' internship programs should be consistent in defining, monitoring, and validating contracting competencies and incorporating industry internship best practices.

The next chapter will introduce internship programs, present the benefits of internships to all those involved and review the best practices of private industry internship programs.

II. LITERATURE REVIEW

A. INTRODUCTION

Chapter II presents a literature review on a type of supervised learning experience known as an internship. The chapter will discuss how internships differentiate from other experiential learning opportunities and how an internship is traditionally defined in private industry. The chapter will also present the benefits of internship programs to the participants, the sponsor organizations, and industry as a whole. The four leading associations primarily responsible for establishing and disseminating the core principles and best practices of quality internships are also introduced. Last, the chapter will identify the core principles and best practices used in private industry internship programs.

B. INTERNSHIPS DEFINED

Herman Schneider, former Dean at the University of Cincinnati, believed that if a student wants to become an engineer, then the student should be provided with the opportunity to practice being an engineer. Additionally, Schneider concluded that technical students learn best when academic education and practical work experience are combined (Cooperative Education and Internship Association [CEIA], 2013). Experiential learning encompasses a wide variety of enriching opportunities for students, including service-learning, volunteering, student organization leadership, campus involvement, faculty-led research and projects, experiential study-abroad, student employment/work-study, cooperative education, and internships (National Association of Colleges and Employers [NACE], 2013). An internship is a monitored work or service experience in which there are intentional learning objectives and the ability to reflect actively on one's learning throughout the experience. Characteristics of an internship include being one month to three years in duration, the incorporation of learning objectives, and promoting academic, personal, and professional development. During an internship, the intern may also be paid or unpaid for part-time or full-time work (True, 2010).

In an effort to establish uniformity in the use and application of the term internship, the Principles for the Professional Practice Committee and the Board of Directors at the National Association of Colleges and Employers (NACE) proposed and recommended using the following definition:

> An internship is a form of experiential learning that integrates knowledge and theory learned in the classroom with practical application and skills development in a professional setting. Internships give students the opportunity to gain valuable applied experience and make connections in professional fields they are considering for career paths, and give employers the opportunity to guide and evaluate talent. (NACE Board of Directors, 2011, para. 6)

Internships are one part of a spectrum of experiential learning opportunities. Clearly identifying the distinctive characteristics of internships is important because the next section will discuss the benefits of participation in experience-based learning that are specific to internship programs.

C. THE BENEFITS OF INTERNSHIP PROGRAMS

Establishing and maintaining a successful internship program is one of the best ways for an organization to shorten the learning curve of new employees and to prepare for future workforce requirements. Successful internship programs are beneficial to everyone involved. For employers, internships prove to be an excellent way for an organization to recruit and evaluate highly motivated potential employees without a long-term commitment. Interns can also provide a fresh perspective and needed solutions to old organizational issues. For the interns, internships provide an opportunity to explore different career paths, learn new skills, gain valuable work experience and develop a professional network (Carlson & Halbrooks, 2003). Industry benefits from internships because of the belief that education and experience are the components needed to produce highly qualified and educated entry-level employees with some experience. Many professional associations work diligently to improve the quality of internship programs for interns, organizations, learning institutions, and industry. The next section will discuss the four leading associations primarily responsible for introducing innovations, core principles, and best practices in internship programs.

D. REVIEW OF PROFESSIONAL ASSOCIATIONS

The following is an introduction to the four leading industry associations that have contributed to the development and promulgation of core principles and best practices that successful internships' embody.

1. Cooperative Education and Internship Association

The Cooperative Education and Internship Association (CEIA) is a professional association for cooperative education that allows students, employers, educators and organizations to gain membership. CEIA was established in 1963 to provide organizational structure to the emerging work-integrated learning movement. According to the association's website, CEIA provides professional development services to its members to facilitate the belief that a structured work environment can enhance formal education and promote continuous learning (CEIA, 2013). The organization's mission statement is:

> The Cooperative Education & Internship Association (CEIA), the leader in work-integrated learning, provides a supportive member-driven learning community for participating programs, students, educators, and employers; influences policy makers and leaders of thought; and forges partnerships with like-minded groups. (CEIA, 2013, para. 1)

2. The National Association of Colleges and Employers

The National Association of Colleges and Employers was established in 1956 and positions itself as the conduit between colleges and employers. The association's mission is to support the employment of the college educated by facilitating a smooth transition from student to workforce participant (NACE, 2013). It is a professional association that bridges recruiting on campus and professional career services, and provides best practices, research, professional development, and conferences (NACE, 2013). NACE offers specific guidance and best practices regarding industry internships via its Principles for Professional Practice Committee and NACE Board of Directors.

3. The National Society for Experimental Education

According to its website, the National Society for Experiential Education (NSEE) is a nonprofit association whose membership includes educators, businesses, and community leaders (National Society for Experiential Education [NSEE], 2013). NSEE was established in 1971 serving as a nationwide resource center to develop and improve experiential education programs. The NSEE mission in part is to facilitate the use of experience as an integral part of education, in order to enhance learning for students and increase the common good (NSEE, 2013).

4. The Council for the Advancement of Standards

The Council for the Advancement of Standards (CAS) was established in 1979 for the purpose of developing standards of professional practice used to guide higher education practitioners and institutions in their work with college students. CAS is composed of a 36 member consortium of professional associations from the United States and Canada who work collaboratively to develop and promulgate functional area standards and guidelines. The CAS mission is to promote the implementation of programs and services that enhance the quality of student learning and development. CAS functional area standards and guidelines are basic statements that should be achievable by any program in any higher education institution when adequate effort and resources are applied. In terms of internship programs, CAS's goal is to establish appropriate standards and ethics while simultaneously advocating for experiential learning and related forms of active, engaged learning (Council for the Advancement of Standards in Higher Education [CAS], 2012). Although CAS standards were originally developed for use by educational institutions, the standards and guidelines are easily applied to industry best practices.

The next section will discuss the eight core principles of quality experiential learning activities first introduced by NSEE. The principles serve as a foundation for industry best practices for internship programs and the standards developed and promulgated by the Council for the Advancement of Standards.

E. CORE PRINCIPLES OF QUALITY EXPERIMENTAL LEARNING ACTIVITIES

Experience and learning are equally important in any experiential learning activity. During an internship, both the intern and the host organization have responsibilities and both parties are empowered to try and achieve the principles. The bulk of the responsibility lies with the host organization, which is expected to take the lead in ensuring both the quality of the learning experience and of the work produced during the internship (NSEE, 2013). The core principles provide the foundation for industry best practices, which facilitate and sustain quality experiential learning activities. The National Society for Experiential Education presented a list of core principles of quality experiential learning activities at their 1998 annual meeting in Norfolk, Virginia (NSEE, 2013). The eight core principles of quality experiential learning activities are as follows:

1. Intention: All parties must be clear from the outset why experience is the chosen approach to the learning to transpire and to the knowledge that will be demonstrated as a result. Intention represents the purposefulness that enables experience to become knowledge and is deeper than the goals, objectives, and activities that define the experience

2. Preparedness and Planning: Participants must ensure that they enter the experience with a foundation sufficient enough to support a successful learning experience. They must also focus from the earliest stages of the program on the identified intentions and adhere to them as goals and objectives, which will define their activities. The resulting plan should include those intentions and be referred to on a regular basis by everyone involved. At the same time, the experience should be flexible enough to allow for adaptations as it unfolds

3. Authenticity: The experience must have a real world context and be useful and meaningful in reference to an applied setting or situation. This means that is should be designed in accordance with those who will be affected by or use it, or in response to a real situation.

4. Reflection: Reflection is the element that transforms a simple occurrence to a learning experience. For knowledge to be discovered and internalized the learner must test hypotheses about the outcomes of decisions and actions, then weigh the outcomes against past experience and future implications. This reflective process is integral to all phases of experiential learning, from identifying intention and choosing the experience, to

considering preconceptions and observing how they change as the experience unfolds. Reflection is essential in adjusting the experience and measuring outcomes.

5. Orientation and Training: For the full value of the experience to be accessible to the learner and to any involved organizational partners, it is necessary that they be prepared with important background information about each other and the environment in which the experience will operate. Once that baseline of knowledge is addressed, ongoing structured development opportunities should also be included to expand the learner's appreciation of the context and skill requirements of the work.

6. Monitoring and Continuous Improvement: Any learning activity will be dynamic and changing, and the parties all bear responsibility for ensuring that the experience continues to provide the richest learning possible, while affirming the learner. It is important that there be a feedback loop related to learning intentions and objectives. The structure of the experience must be sufficiently flexible to permit change in response to what the feedback suggests. While reflection provides input for new hypotheses, other strategies for observing progress against intentions and objectives should also be in place. Monitoring and continuous improvement represent the tools of formative evaluation.

7. Assessment and Evaluation: Outcomes and processes should be documented with regard to learning intentions and outcomes. Assessment is a means to develop and refine the specific learning goals and objectives identified during the planning stages of the experience, while evaluation provides comprehensive data about the experiential process as a whole and whether it has met the intentions.

8. Acknowledgment: Recognition of learning and impact occur throughout the experience by way of the monitoring processes, through reporting, documentation, and sharing of accomplishments. All parties to the experience should be included in the recognition of accomplishment. Culminating documentation and celebration of learning help provide closure and sustainability to the experience (NSEE, 2013, para 1).

Internships are a critical part of building the future workforce. Successful internship programs provide numerous benefits for the organization and the potential intern. To establish and maintain a successful internship program, it is important to identify and incorporate industry best practices. The eight core principles for experiential learning lay the foundation of an internship program's best practices.

F. INTERNSHIP PROGRAMS BEST PRACTICES IN PRIVATE INDUSTRY

The private industry best practices for internship programs presented are based on an extensive literature review of published works and association websites dedicated to improving internship programs. The experiential learning core principles and industry best practices are also applicable to government internships. The industry best practices will be used in a comparative analysis of the practices used by the three DoD contracting internship programs. The industry best practices for internship programs are as follows:

1. Conduct an Internal Audit and Prepare a Support Structure for the Interns

Laying a solid foundation for the internship is essential to the program's success. An organizational audit must be performed. The organization should begin by conducting a meeting to include representatives for all of the personnel who will work with or may be affected by the presence of interns (Inkster & Ross, 1998). The organization must assess whether it has the staff, physical resources, and financial resources to support an internship program. It is important that an organization be able to support its interns both programmatically and financially. Internship programs must have the funding to accomplish the internship mission and goals. In establishing funding priorities, a comprehensive analysis must be conducted to determine any unmet needs of the organization, relevant expenditures, and the financial impact of hosting an internship program (CAS, 2012).

There must be an organizational culture that facilitates a commitment to personal and professional growth before immersing interns into the environment (Inkster & Ross, 1998). An internship is an intentionally designed learning experience, which means the organization must expect to make an investment of time and energy into the intern's learning and growth (Inkster & Ross, 1998). The host organization must also know what type of work the intern will be expected to perform and ensure they have a safe and adequate work space. For example, in an office setting, the intern must have access to a computer, telephone, fax, copier, Internet and other appropriate technological tools (Inkster & Ross, 1998). The host organization must also take into account the sustainability, regular maintenance and life cycle costs of facilities and equipment proposed for use by the interns (CAS, 2012).

2. Encourage Executive and Staff Level Involvement

Executives are the leadership and role models of an organization. Accordingly, it is extremely important to solicit and gain support for the internship program from executives and all levels of management within an organization (Bottner, 2007). All successful internship programs in major organizations stem from executive level buy-in, which is more than just approving funds to build the program's financial foundation (Bottner, 2007). Executives should be given program development updates such as how interns are adding value to the organization. Executives can support the internship programs in ways such as sending out an organization-wide communication piece announcing the launch or improvement plan of the internship program, welcoming the interns during orientation, and speaking with them during other less formal junctures. It is beneficial for organizations and interns to bring professionals in from the company's executive ranks to speak with interns. It is a great career-development and role-modeling experience for interns. A great advantage for students involved in internships is the access they get to successful professionals in their field (Cunningham, 2012). The interaction will help promote the value of working for the organization and keeps the senior staff invested in the internship program.

Sponsor organizations should also encourage its staff members to engage with the interns in a way that enhances the internship experience. Staff can sponsor social or professional development events, and help to orient the interns to company culture (Cunningham, 2012). Effectively engaging all levels of the organization in various facets of the internship program is a primary way to demonstrate to interns that their presence and contributions are valued by the organization (Bottner, 2007).

3. Write a Position Description

Position descriptions should be drafted after an organization has developed a profile of its resources, interests and needs for potential interns. A written job description projects planning and purpose on the part of the host organization. It facilitates the interview, helps to ensure a better match, and facilitates the monitoring and feedback process during the internship (Inkster & Ross, 1998). The job description should detail

the projects that the intern is expected to complete. It should provide a realistic preview of the interns' potential job duties (Bottner, 2007). The basis of the following guidance for designing a job description is from the Walter Mahler book, *How Effective Executives Interview*. Mr. Mahler suggests drafting the description in consultation with the supervisor and those who perform similar tasks both within and outside the organization. He also suggests identifying the intern's primary responsibilities and any end products to be completed by the end of the internship. Last, Mr. Mahler suggests specifying the educational background, knowledge, skills, and training expectation from the intern (Mahler, 1976).

A host organization should also include a description of what the intern can expect to learn, internship duration, work hours, salary and/or stipend, and a description of the organization to include its mission statement and purpose. The description should also include a list of training that will be provided, specific benefits to be gained from the experience, and other special opportunities during the internship such as meetings and travel (Inkster & Ross, 1998).

4. Write a Training and Development Plan

The primary mission of an internship program is to engage students in planned, education-related learning experiences that integrate knowledge, practical application, and skill development in a professional setting (CAS, 2012). An important element that distinguishes an internship from a regular job is that an internship incorporates measureable learning objectives (Carlson & Halbrooks, 2003). Interns need learning objectives, defined goals for the internship, personal development goals and professional development goals outlined in the training development plan (Bottner, 2007). The interns should assist in selecting and defining goals. Ideally, selection will be based on furthering the learning and developmental outcomes initiated in college, which contribute to the realization of their full potential (CAS, 2012). While most of what the intern will learn is job-related or industry specific, it is mutually beneficial to incorporate core competencies such as writing, presenting, problem solving, decision making, leadership, and critical

thinking into the training plan. The goal is to cultivate and strengthen the interns' existing skills during the internship (Bottner, 2007).

A well written plan should clearly identify the intern's learning goals, lay out a plan of action for achieving the goals and assessing progress, and defines the responsibilities of everyone involved (Inkster & Ross, 1998). Timelines with tentative completion dates are usually established for each learning objective so that the internship coordinator and supervisor can track the intern's progress (Carlson & Halbrooks, 2003). The training plan should be grounded in realistic timeframes as well as in realistic expectations of the work and the interns' capabilities (Sweitzer & King, 2009). Learning goals should be flexible enough to respond to the changing needs and abilities of the intern during the internship, and the changing ability of the organization to make use of the intern's growing expertise and confidence (Inkster & Ross, 1998).

The training plan has three general components and should answer three basic questions: (1) Learning Tasks - what should the intern learn? (2) Learning Methods - how will the intern learn it? (3) Evaluation - how will the learning be assessed? (Inkster & Ross, 1998). The learning tasks provide a specific description of what the intern will do in order to accomplish the learning objective. A single learning objective may be accompanied by more than one learning task (Bottner, 2007). The job description provides a good framework for what the organization wants the intern to learn. Another source is reviewing the needs of the organizational departments, programs, and projects that the interns will be working in and converting those needs into learning objectives. How the intern will learn can be categorized into methods such as on-the-job training, workshops, training classes, research projects or academic reading assignments.

There are two kinds of assessments used to evaluate the intern's learning. A formative assessment takes place throughout the internship and gives the intern the information to grow, adjust, and change. A summative evaluation assesses the intern's overall performance by way of verbal feedback given from the personnel working directly with the intern, reflective self-assessment memos written by the intern, and evaluation reports written by the intern supervisor or mentor (Inkster & Ross, 1998).

5. Conduct Orientation

It is important for everyone involved with the internships to be in accord with the mission, purpose, and guidelines of the program. Orientations ensure that everyone starts with the same expectations and role definitions (Cunningham, 2012). They help establish the intern's sense of membership in the organization and help to alleviate the anxiety and disorientation that likely occurs with new interns (Inkster & Ross, 1998). It is best to hold a separate orientation session for the interns and another session for the intern managers, mentors and supervisors. The effort put forth in preparing all of the parties involved will most likely result in a better organized internship program.

The orientation scheme depends on the organization's size, the time and resources available, and the complexity of the intern's proposed duties. A good approach is to provide pre-orientation materials such as relevant policies and procedures, pamphlets, mission statements, and promotional videos before the intern reports the first day (Inkster & Ross, 1998). This type of pre-orientation can help the intern get up to speed with the organization more quickly and reduce initial anxiety. If possible, it is best to have all the interns begin the program and enter orientation on the same day. If it is cost-effective, allow the staff to welcome the interns as a group to convey to the interns they are not alone. The organization's mission statement and goals should be communicated during orientation. Orientations should also include important items such as a tour of the building, personnel introductions, an explanation of organizational protocols for reporting, appropriate work attire, maintenance of work space, safety regulations, security, customer relations, and commonly used acronyms or jargon (Inkster & Ross, 1998). An organizational chart is another beneficial item to provide an intern during orientation because having access to the chart is a great way for them to become acclimated to the people within the organization (Bottner, 2007).

6. Assign Challenging Tasks and Projects

Providing interns with real work is essential to ensuring an internship program's success. Interns should be doing work that is relevant, challenging, and worthwhile to the organization. They should not be bogged down by only routine administrative work or

menial tasks that provide little valuable work experience. However, menial tasks can provide significant learning if interns are provided with a big picture aspect of the tasks' importance (Bottner, 2007). Interns should also not be given a complexity of work that is over his or her demonstrated skill level. The assigned duties should strike a balance between putting forth an effort and being involved in projects or tasks that allow the intern to be useful (Bottner, 2007). Several steps can be taken to ensure that real work assignments are provided such as reviewing the job descriptions, asserting that real work assignments are important, and frequently communicating with interns throughout the internship duration to determine their perception of the work they are doing (Cunningham, 2012). It is best if the host organization develops a list of departments, programs, and projects that could provide an appropriate learning environment for inexperienced interns. Some projects can be segmented in a way that allows interns to work on a specific task or tasks of a larger project. The intern should be informed as to how that particular task relates to the overall project and the goals of the organization in general (Cunningham, 2012).

7. Assign an Internship Program Coordinator

According to the CAS internship program standards, leaders with organizational authority for the programs and services must provide strategic planning, supervision, management, and program integrity (CAS, 2012). It is a best practice for organizations to have a dedicated internship program coordinator as it is the best way to ensure that the program runs smoothly and stays focused on the organization's criteria for success (Cunningham, 2012). The internship coordinator does the legwork related to the internship program. He or she decides which departments receive interns, assigns supervisors, reviews intern learning plans, writes job descriptions, and conducts recruiting activities (Bottner, 2007). The coordinator is the single point of contact for people inside and outside the organization to discuss the internship program (Inkster & Ross, 1998).

8. Assign a Supervisor

A key player from within an organization that must commit fully to the internship program in order for it to succeed is the intern supervisor. Interns are assigned and report

directly to supervisors who establish their day-to-day activities and conduct evaluations of the interns' work. Depending on the size of the organization, the roles of supervisor and coordinator may be delegated to one individual. In larger organizations, supervisors are typically the line managers that oversee the interns' job performance (Bottner, 2007). The process of choosing an intern's supervisor should be done carefully because the supervisor can help determine whether the intern has a positive or negative experience. Pairing interns with poorly trained, ineffective supervisors can negatively reflect on an organization and may contribute to a valued intern's decision to decline a future job offer. An individual who is an excellent supervisor of full-time, experienced individuals is not necessarily an effective intern supervisor because supervising an intern with little or no experience is different and considerably more difficult (Bottner, 2007).

Bottner (2007) provides some recommended actions that effective intern supervisors should perform. He suggests first to allow the interns to ask questions, and then be sure to answer them. Interns are new to an organization and desire to gain a deeper understanding of the industry. They typically have several questions relating to work assignments, industry standards and the organization as a whole. Next, Bottner recommends supervisors avail themselves for consultation. Consultation and questions are different because consultation takes more time as it is a more informative conversation. Supervisors should also be instructors, Bottner states. As the supervisor provides the intern with work, he or she must also explain in detail what they are expecting the intern to accomplish. Treating the intern professionally and with respect is critically important because the way interns are treated reflects on the host organization. Last, Bottner recommends that supervisors remain approachable. Aside from a possible mentor, the supervisor is typically the interns' only significant relationship within the organization. If the supervisor is unapproachable or not receptive when an intern wants to discuss an issue, it may be harmful to their internship experience (Bottner, 2007).

9. Assign a Mentor

If given some time, guidance, and support, an intern can develop into an effective contributing member of an organization. The time and effort invested early in mentoring

an intern can be more than fully gained back as the intern becomes increasingly self-reliant and productive (Inkster & Ross, 1998). A person from the host organization must be selected that has the teaching/mentoring skills to make an effective internship mentor. Their schedules must be flexible enough to allow them to provide patient support, planning, direction, instruction and encouragement, especially in the early stages of the internship (Inkster & Ross, 1998).

Michael Zey identifies a four-level hierarchy of mentoring roles in his book, *The Mentor Connection: Strategic Alliances in Corporate Life*.

a. Level One: Teaching

Teaching is the most basic role that the mentor uses to teach the job, impart the knowledge needed to perform the job, communicate information about organizational life and provide basic career guidance (Zey, 1991).

b. Level Two: Personal Support and Informal Counsel

The mentor provides psychological support and perspective, helps the intern feel more comfortable assuming more responsibility, builds the intern's confidence, and helps with personal issues or conflicts that interfere with job performance (Zey, 1991).

c. Level Three: Organizational Intervention

The mentor protects the intern by interfering in conflicts and situations that degrade the intern's effectiveness; increase the intern's visibility and advertise the intern's good qualities; and helps the intern gain access to resources in the organization (Zey, 1991).

d. Level Four: Sponsoring

The mentor explicitly recommends the intern for more responsibility, permanent employment, or promotions, etc. (Zey, 1991)

General guidelines for effective intern mentoring are (1) know the intern's learning objectives, discuss them with the intern and continue to review them regularly

(2) provide frequent, specific, descriptive positive and negative feedback to the intern describing the actions and results observed (3) encourage the intern to be an active problem solver that asks questions and seeks the answers (4) when problems occur, communicate directly with the intern preferably with face-to face meetings and (5) invite feedback from the intern and listen supportively (Inkster & Ross, 1998).

10. Provide Rotational Opportunities

A rotational internship is when the intern has the opportunity to experience work in either different areas of a specific discipline or in different areas of an entire organization. The rotation should allow the intern to work in another area for a specific period of time with the goal of providing the broadest workplace experience. The major advantage of a rotational program is that it guarantees that the intern will be exposed to as many different facets of an organization as possible (Bottner, 2007).

11. Provide an Intern Handbook and Website

An intern-specific handbook and internship website both serve as guides for interns because they answer frequently asked questions and communicate organizational rules in a welcoming manner (Cunningham, 2012). A separate intern website serves many of the purposes of the handbook, but has the advantage of being easy to change. The website can be used as a communication tool to provide relevant information to interns. It can include upcoming events, announcements and feature articles of interest written for or by the interns themselves. A website can also be beneficial to interns who are working on rotational assignments at remote locations and want a connection to the organization's main location (Cunningham, 2012).

12. Provide Housing and Relocation Assistance

Internship sponsor organizations should consider offering assistance towards housing expenses such as a stipend or subsidy. If the intern must relocate in order to participate in the internship, it is good to pay some or all of the intern's relocation expenses to and from the job site. For interns relocating because of an internship opportunity and then finding affordable, short-term housing can be overwhelming

(Cunningham, 2012). If a stipend or relocation expenses cannot be offered then assistance in locating affordable housing is another option. Cunningham (2012) also suggests the organization establish a clear policy detailing the rules of eligibility in order to eliminate any perceptions of unequal treatment if a stipend is offered. Facilitating an intern's smooth transition to a new location will help an organization attract better quality candidates.

13. Offer Compensation and Benefits

It is an industry best practice to offer interns compensation and benefits. The compensation amount and frequency should be established before the internship begins. Some interns are managing classes, the internship and another job to pay for basic essentials. Thus, receiving compensation from the internship may alleviate some pressure by allowing the intern to reduce work hours from the other job. Employed people incur costs attributed to holding down a job such as transportation expenses and the procurement and maintenance of work attire. Interns will incur the same costs and should not suffer a financial loss in order to participate in an internship. Compensating interns for work performed has advantages. First, compensating interns creates ownership in the program by both the business and intern. Interns that are unpaid may view the internship as volunteering, which has the potential of reducing their commitment or motivation (Nebraska Department of Economic Development, n.d.). Secondly, advertising paid internships will likely increase interest in the position, boost the potential qualified candidate pool, and improve the chances of finding the ideal intern (Nebraska Department of Economic Development, n.d.).

Host organizations should also offer intern-specific benefits, which may be slightly different than the type of benefits a full-time or part-time employee receives such as vacation days or health insurance. The benefits are in addition to any wage compensation the intern receives and is a great way to reward diligence (Bottner, 2007).

Tuition reimbursement, tuition assistance or scholarships are great tools to attract and possibly retain internship candidates with the desired qualifications. If funds are available, it is good practice to pay the intern's tuition for courses taken while working

for the organization. Other benefit options include subsidized mass transit (i.e., bus or commuter train) tickets, transportation stipends, free parking, discounts on company merchandise, meal allowances, free or low cost gym memberships, uniform stipends, and industry exam or preparation class reimbursement (Bottner, 2007). Beneficial incentives greatly increase intern morale and satisfaction while showing how much the organization values the interns' contribution (Carlson & Halbrooks, 2003).

14. Offer Training and Skills-Building Classes

A good way to demonstrate the organization's interest in the intern's development is to provide them with access to internal and external training opportunities (Cunningham, 2012). Organizations tend to host internal training and seminars for their employees on specific job-related skills such as a computer language, and in general skills areas, such as time management or mediation. Allowing interns to attend these programs is a significant benefit that provides excellent experiential learning (Bottner, 2007).

15. Showcase Intern Work Through Presentations and Expositions

A primary reason for hosting an internship program is to garner a fresh perspective from interns with the most current education to make an impact on the organization. Interns work very hard at completing work and are generally proud of the accomplishments. It is a best practice to provide interns with a forum to showcase their innovative ideas. The presentation technique can take many forms (Bottner, 2007). Interns work very hard at completing their work and are generally proud of their accomplishments. Setting up a venue for them to do presentations (formal presentations or in a fair-type setting such as an expo) not only allows them to demonstrate their achievements, but also showcases the internship program to all employees (Cunningham, 2012).

16. Offer Flexible, Part-Time or Compressed Work Schedules

A flexible schedule appeals greatly to most interns because college students typically have varying schedules. A standard forty hour work schedule is quite an adjustment for the average college student. Offering a flexible, part-time or compressed work arrangement eases the intern's transition into the working world. It may make the

intern feel less constrained by an unchanging daily schedule. It also allows the interns to continue working on any outstanding academic requirements (NACE, 2013).

17. Provide Continuous Feedback

It is essential to provide interns with feedback throughout the duration of the internship (Bottner, 2007). Providing consistent and timely feedback to interns ensures that they have an opportunity to demonstrate success or improve performance during their internship experience (Bottner, 2007). Feedback is categorized into one of the following areas: (1) periodic informal conversations (2) a mid-internship performance review or (3) a formal, final performance appraisal. Prior research on the benefits of employee feedback (London, 2003), finds that the certain benefits are applicable to interns. One benefit is that feedback can help interns set appropriate goals for themselves and the internship itself. Based on the feedback, the intern can see what they have accomplished, which may motivate them to achieve more. Research on motivation theory has shown that feedback can serve to enhance the intern's motivation because they will understand what it takes to be successful. Another benefit is that positive feedback can help interns feel like they have achieved something even when their achievement does not lead to the completion of a project. Last, feedback can help interns identify learning gaps. They have a clearer sense of their own weaknesses and they have an enhanced ability to take charge of their own development (London, 2003).

According to Bottner (2007), feedback that is given right after an action and the individual's reflection on that action is more likely to result in learning. The feedback should be specific, descriptive, and focused on the task, action or behavior. It should be presented clearly, simply, directly, and in a way that is helpful (Bottner, 2007).

Midterm is a good time to take stock of the intern's performance, adjust behaviors, and renegotiate expectations where necessary. The intern is encouraged to develop a portfolio of work accomplished, which can give the supervisor a basis for the evaluation. According to Bottner (2007), observation, consultation, and skills training are three of the best ways to assess the intern's performance and contributions to an organization. Supervisors should observe and assess how the intern demonstrates

technical competency and responsibility, and collaborates with other members of the organization (Bottner, 2007). Intern supervisors should also solicit feedback from colleagues internal and external to the organization to provide input regarding the intern's performance. Last, observing the intern demonstrate new skills following training is another measure of assessment which supervisors can use to document the intern's progress (Bottner, 2007). Ongoing monitoring and the use of the job description and learning plan will facilitate both the midterm and final evaluations (Inkster & Ross, 1998). Mid-internship and final evaluations should be given in writing so that the intern and the organization can keep recorded documentation. The Council for the Advancement of Standards internship program standards (2012) encourages the use of qualitative and quantitative methodologies to determine whether and to what degree the stated mission, goals, and intended outcomes are being met as effectively and efficiently as possible.

18. Off-board at the End of the Internship

There is a definitive end to the time the intern spends with an organization and thus the off-boarding process is something to be celebrated (Bottner, 2007). From the intern's perspective, the end of an internship can be an emotional experience (Sweitzer & King, 2009). It is an organization's last opportunity to show appreciation to the interns for their hard work. Off-boarding can be as simple as taking the intern out to lunch or giving them a thank you note (Bottner, 2007). An organization may even consider offering high-performing interns full-time positions as a gesture of appreciation during off-boarding.

The other critical component to off-boarding is the opportunity to gain valuable feedback from the intern as to the program's strengths and weaknesses. Providing feedback surveys and conducting focus groups are great methods of obtaining the interns' opinions about the organization (Cunningham, 2012). Both can be utilized to measure program satisfaction and effectiveness (Bottner, 2007). Online surveys are a cost-effective method for collecting large quantities of data from a target audience and storing it for future analysis. Focus groups may be structured or informal, but the basic premise is that a facilitator asks the interns to respond to pre-determined questions or poses target

questions in response to comments previously shared by participants (Bottner, 2007). An exit interview is an excellent way to gather feedback on the intern's experience and to assess the student's interest in returning to work for the company full-time (Cunningham, 2012). All of these methods can yield valuable information to identify which components of the program are successful and which need improvement.

G. SUMMARY

Establishing and maintaining a successful internship program using the industry best practices requires advanced thought and planning. This chapter provided the core principles of experiential learning and introduced the four industry associations that have contributed to the development and promulgation of principles of good practice and innovations in internship programs. The chapter also discussed the National Association of Colleges and Employers proposed and recommended definition of the term internship. Last, this chapter identified the private industry best practices which will later be compared to DoD contracting internship programs.

The next chapter begins with a presentation of the technical competencies that DoD contracting interns should possess prior to reaching their target grade. Chapter III concludes with an overview of the Army, Navy, and Air Force's contracting internship programs as they relate to the private industry internship best practices.

III. DEFENSE INTERNSHIP PROGRAMS

A. INTRODUCTION

This chapter presents a comprehensive review of the Departments of the Army, Air Force, and Navy/Marine Corps contracting career field, entry-level internship programs for DoD civilians. The chapter begins by introducing the DoD contracting competencies and then provides details regarding (1) the Department of the Air Force's COPPER CAP program (2) the Department of the Army's Career Program CP-14 Contracting and Acquisition Management Development Program and (3) the Navy/Marine Corps' Navy Acquisition Internship Program. The chapter presents the civil service employment benefits and the current Defense Acquisition Workforce Improvement Act certification requirements inherent to each of the defense contracting internship programs. A subsequent discussion of the specifics of each program will follow as they relate to the industry internship best practices presented in Chapter II. The information provided is later used in Chapter IV to analyze each DoD internship program in comparison to DoD contracting competencies and the industry best practices.

B. TECHNICAL COMPETENCIES FOR THE CONTRACTING CAREER FIELD

Technical competencies are the skills, knowledge, and abilities members of the acquisition workforce must have in order to perform their contracting duties (Federal Acquisition Institute, 2013). In March 2007, participants from across the Department of Defense and the Contracting Community, a segment of the Defense Acquisition Workforce, completed the development of the DoD Contracting Competency Model. The "comprehensive model identifies the observable and measurable technical behaviors and associated knowledge that underlie superior job performance for the contracting workforce" (Thomas, Brooks, Uzoukwu-Omoike, & Pittsonberger, n.d.). It is a full spectrum view of contracting processes and job requirements. The competencies listed are especially useful for new, inexperienced entrants in the contracting workforce to help develop the necessary skills base needed to function effectively in contracting.

The model was developed by engaging DoD senior contracting leaders and 377 subject matter experts from across all components and career levels. The panel of expert senior contracting leaders developed a framework of technical competencies needed by highly effective contracting professionals. The model provides detailed insight into the underlying behaviors and desired outcomes that yield success in the contracting career field (Thomas et al., n.d.). Appendix B identifies the DoD Contracting Competency Model. It encompasses 10 units of technical competence, which are made up of twenty-eight technical competencies and fifty-two technical elements. The units of competence are high level functional areas that are comprised of all of the activities associated with a job and serve as the basic building blocks of the model. The technical competencies are observable and measurable patterns of skills, knowledge, abilities, behaviors, and other characteristics that an individual needs to perform work roles or occupational functions successfully. The technical elements are behavioral statements describing a task that results in an outcome of high value. An element statement typically consists of an action verb, an activity, and a specific result or outcome that represents superior performance (Thomas et al., n.d.). The model will be used in Chapter IV as the baseline to determine whether the DoD technical competencies for contracting are covered consistently among the defense organization internship programs.

The Director, Defense Procurement and Acquisition Policy (DPAP) joined with the Department's Senior Procurement Executives and the Acquisition, Technology and Logistics (AT&L) Director of Human Capital Initiatives to pursue a competency-based approach to workforce management for the DoD contracting workforce in 2007. The effort helped the DoD address the need to hire and train more people in the contracting workforce so that the mission could be performed effectively, efficiently, and in a manner that assures the lawful operation of the federal acquisition system (Thomas et al., n.d.). The increased hiring effort began with defense contracting internship programs, which are discussed in the following sections.

C. DEFENSE INTERNSHIP PROGRAM INHERENT CHARACTERISTICS

The internship focus areas discussed in the following subsections are common and universally applicable to all three of the defense internship programs. Prefacing the review of defense internship programs with a presentation of their inherent characteristics is important because they directly address a number of the best practices identified in the literature review, such as compensation, benefits, and training. Introducing the programs' common and inherent characteristics at the commencement of the defense internship review also reduces the amount of redundant information presented. This approach also facilitates a focused discussion on each defense internship programs' differentiating characteristics.

1. Federal Employee Benefits

Private industry typically uses the term intern to refer to students who are hired into temporary positions, often during summer months, with the explicit purpose of assessing the possibility of longer-term employment. DoD interns, however, begin in entry-level federal service positions as full-time employees earning a competitive salary and receive structured professional development (Gates, Keating, Tysinger, Jewell, Daugherty, & Masi, 2009). They are eligible for all of the benefits offered to the federal workforce (Army Contracting Command, 2010). A civil service package for permanent, full-time federal employees is very favorable and includes such benefits as paid federal holidays and vacation days. A complete list of federal employee benefits is located in Appendix A.

2. Position Descriptions

The classification standards program for General Schedule (GS) positions was enacted by the Classification Act of 1949. It was codified in Chapter 51 of Title 5, United States Code. The statute requires the classification of all positions in the federal service. The law requires the Office of Personnel Management (OPM) to define federal occupations, establish official position titles, and describe the grades of various levels of work. To fulfill this responsibility, OPM approves and issues position classification

standards that must be used by agencies to determine the title, series, and grade of positions covered by Title 5 (U.S. Office of Personnel Management [OPM], 2009).

A position description, commonly called a PD by federal workers, documents the major duties, responsibilities, and organizational relationships of a job. All federal positions are required by law to have a position description because it serves as the official record of the job classification and proof of statutory compliance (U.S. Office of Personnel Management [OPM], 1991). For defense organization interns, position descriptions provide a general description of the intern's primary duties and includes the knowledge, skills, and abilities (KSAs) required for successful progression to the target positions.

Each defense organization's internship program office classifies the position descriptions for each grade level. For example, the Department of the Air Force's PALACE Team prepares formal position descriptions for entry, intermediate, and target level interns (Department of the Air Force [DAF], 1994).

3. Promotions

Promotions and salary increases for defense organization interns are based on meeting the time-in-grade requirement, satisfactory or better performance on the job, successful progress as prescribed in the intern's development plan, and a recommendation by the supervisor of record. Generally, the defense intern's primary command is charged with identifying a permanent, locally funded position for interns within a specific timeframe of the intern's projected graduation date.

4. Defense Acquisition Workforce Improvement Act Certification Requirements

Each defense organization's internship program provides a comprehensive training program that includes a structured development plan, opportunities for rotational assignments, extensive on-the-job training, and certification in the contracting career field through the Defense Acquisition University. In accordance with each of the defense organization's development plans, the intern must complete the training, education, and experience requirements to attain Contracting Levels I and II Defense Acquisition

Workforce Improvement Act certification by the end of the internship (Department of the Army [DA], 2013a) (Department of the Air Force [DAF], 2011) (Department of the Navy [DoN], 2013). The most current DAWIA certification standards for levels I and II are identified in Appendices C and D.

D. DEFENSE CONTRACTING INTERNSHIP PROGAMS OVERVIEW

The Department of Defense procures everything from satellites, electronics, and high-performance aircraft to supplies and services necessary for the day-to-day operation of military installations around the world. Each year, billions of dollars are obligated by contracting professionals to ensure that America's warfighters have what they need by way of supplies and services (DAF, 2013). In fiscal year 2012, the Department of Defense obligated approximately of $360 billion dollars in contracts for supplies and services (Government Accountability Office [GAO], 2013).

1. The Department of the Air Force's COPPER CAP Program

a. General

The Department of the Air Force's COPPER CAP program is an intern program designed to develop well-qualified and highly motivated individuals to occupy full performance level positions in the contracting career field. Headquarters United States Air Force (HQ USAF) developed the Air Force Procurement Career Development action plan in 1970. The plan, called Project COPPER CAP, was an attempt to solve a number of personnel problems in Air Force procurement (Moureax & Naylor, 2003). The COPPER CAP program is a PALACE Acquire program centrally managed by Air Force Personnel Center at Randolph Air Force Base in Texas. There is a PALACE Acquire program for 23 career fields within the Air Force but the Contracts Negotiator PALACE Acquire program is the only one with a nickname for its members, which is COPPER CAP (ASC/PK Wright Patterson Contracting, 2013). COPPER CAP interns are in a formal training program and are in separate competitive levels from the general Air Force civil service workforce. Potential candidates should be highly qualified, well-motivated persons who have demonstrated, through their academic background and/or their job experience, the aptitude and capability to develop into successful civilian contracting career field leaders. This

program is intended to develop contracting personnel to be effective acquisition professionals in various types of contracting (operational, research & development, specialized, systems, etc.) for the Department of the Air Force (DAF, 1994).

b. Stricture and Funding

COPPER CAP interns are centrally managed and funded through the Air Force Personnel Center (AFPC), Civilian Career Management Directorate and administered by the Contracting Career program office, HQ AFPC/DPKCQ located at Randolph AFB, Texas (4th Contracting Squadron, n.d.). COPPER CAP consists of basic and advanced phases. The entry level at the basic phase begins at GS-05 or GS-07. The target grade ranges from GS-09 to GS-12. The minimum training period is normally three years with the exception that training is only two years if the grade begins at GS-07 and the target position is a GS-09. The maximum training period is five years when the entry level is GS-05 and the target position is GS-12 (DAF, 1994). Functional managers may fill basic phase positions from either external or internal sources. Selecting officials may use one of two external recruitment options: the Outstanding Scholar program or the OPM Administrative Careers with America (ACWA) examination. Graduates and candidates for graduation from an accredited college or university with a 3.45 or higher undergraduate grade point average or a ranking in the upper 10 percent of their college or major university subdivision; e.g., School of Business or School Of Arts and Sciences, are eligible under the provisions of the Outstanding Scholar program. The selecting official may hire qualified individuals using established local merit promotion procedures for internal recruitment (DAF, 1994). Positions in the advanced phase concentrate on developing future managers or specialized skills. Entry level for the advanced phase begins at the GS-09 or GS-11 level. The target grade may be either GS-11 or GS-12, depending upon the length of training (one to two years). The maximum training period for a GS-12 is one year. All eligible, qualified, and interested Air Force employees may compete for advanced phase COPPER CAP positions (DAF, 1994).

Funding for the program is provided by the Air Force Personnel Operations Agency (AFPOA/DP) and managed by the PALACE Team. Candidates accepting

COPPER CAP positions, whether they are current federal or new Air Force employees, pay their own initial travel and transportation expenses to the first duty location. Travel and per diem for Air Force-sponsored courses that are required by the approved Intern Training Plan (ITP) plan are funded by the PALACE Team (DAF, 1994).

c. Internship Coordination

The PALACE Team serves as the internship program coordinator. The team prepares and provides recruitment literature to universities, prepares proposed training budgets based on the cost analyses of training in formal ITPs, schedules intern training within budget allowances, and conducts field visits to evaluate intern training. Additionally, the team monitors intern progress through supervisors and periodic progress reports, funds travel and per diem for Air Force-sponsored courses that are a part of the approved ITP and ensures placement of interns in permanent, locally funded positions after graduation from the program. The PALACE Team also prepares standardized, formal Intern Training Plans for each occupational series and grade level (DAF, 1994).

d. Intern Supervisor

The supervisor provides training according to the ITP and submits a supplemental plan or changes to the initial training plan to the PALACE Team for approval. The intern supervisor identifies all formal schooling set forth in the ITP, develops a performance plan, and evaluates the intern's performance. They also serve as mentors or work with assigned mentors. The supervisor reviews the ITP with the intern at least once a year during the annual performance appraisal (DAF, 1994). The supervisor consults the ITP during the annual training survey to identify formal school requirements for the year. Supervisors will follow the rotational assignments and on-the-job (OJT) requirements set forth in the ITP. Some flexibility in assignments based on mission requirements is acceptable; however, supervisors must immediately report significant deviations from the ITP to the PALACE Team (DAF, 2011).

e. Mentoring

According to AFI 36–602, the COPPER CAP intern may be assigned a mentor or the responsibilities of mentorship may be assigned to the intern's supervisor. Regardless, mentors should have technical expertise in the area of contracting in order to provide advice, guidance, and support to the intern during the entire program period. The assigned mentor should work with the supervisor of record to prepare the intern's training and development plan for each grade level and subsequent recommendations for promotion. Mentors or supervisors discuss training and development plans with the intern before or at the time they begin the internship program (DAF, 1994).

f. Orientation

COPPER CAP interns are required to partake in the New Employee Orientation (NEO) course upon entry into the program. The orientation covers the program's purpose, the Air Force mission and major programs, and related administrative program requirements and procedures. NEO is designed to acclimate new civilian employees to the Air Force and ensure a successful beginning (DAF, 2011). Newly appointed intern supervisors also undergo a separate supervisor orientation conducted by the PALACE Team. The supervisor orientations address training requests, counseling, performance evaluations and promotion procedures (DAF, 1994). For example, the 4th Contracting Squadron ITP states that the orientation entails becoming familiar with contracting organization, interrelationship with customers, and the Federal Acquisition Regulation (FAR) structure. The interns are provided with a squadron organization chart, management/supervisory briefings, and an organizational walk-thru (4th Contracting Squadron, n.d.).

g. Rotational Assignments

Rotational assignments are components of the COPPER CAP program and included in the Master Development Plan (MDP). The interns may rotate for a period of two to six months to enhance the learning experience through exposure to other functional areas within the organization. Each intern is assigned a rotational assignment supervisor who will evaluate the intern during the rotation (DAF, 1994).

h. Appraisals and Evaluations

Unless the intern receives a reassignment or promotion to another organization, the initial supervisor of record serves as the rating official during the entire training program. The supervisor of record develops a performance plan using the position description and the ITP as a reference, and solicits input from the intern and other assignment supervisors who will participate during the rating period (DAF, 1994). After discussing the performance plan with the intern, the supervisor of record provides copies of the performance plan to the assignment supervisors. COPPER CAP interns receive initial 90-day appraisals, quarterly evaluations (semiannual after the first year), and annual appraisals. The supervisor of record conducts the initial 90-day and annual performance appraisals in accordance with standard Air Force procedures based on personal observation and input from assignment supervisors. The supervisor of record conducts an annual appraisal using input from rotational and assignment supervisors. The appraisal period is from 1 July through 30 June of each year (DAF, 1994).

The intern and the supervisor submit periodic evaluations to HQ USAF on a quarterly basis during the first year and semiannually thereafter. Supervisors provide these periodic evaluations to the PALACE Team. Supervisors evaluate intern performance and the adequacy of the ITP. Supervisors may make changes to the ITP at this time. The PALACE Team, servicing Civilian Personnel Flight (CPF), and intern receive copies of the completed evaluation (DAF, 1994).

The COPPER CAP interns have an opportunity to evaluate the internship program at the time of promotion or annually by preparing and submitting a training program evaluation to the PALACE Team. The evaluation includes a statement indicating whether or not the training completed provided the necessary knowledge, skills and abilities and recommended changes or comments about the training program. HQ USAF conducts an annual review of the program to determine program effectiveness through feedback from supervisors, PALACE Teams, recruiters, and interns among others (DAF, 1994).

i. Training

Training is crucial to the development of COPPER CAP interns. PALACE Teams carefully develop ITPs to increase proficiency through competency-based training and experience. The internship experience is enriched with mentoring and appropriate rotational training assignments (DAF, 1994). The COPPER CAP formal training program consist of performing developmental assignments and completing formal, informal, and/or on-the-job training in the Contract Specialist (1102) occupation. The intern serves as a Contract Specialist in a developmental capacity in order to acquire the competencies required to develop and recommend acquisition and sourcing strategies for supplies and services. Working closely with a journeyman level Contract Specialist, the intern learns to solicit, evaluate, negotiate, and recommend award of procurements; analyze and evaluate cost or price proposals; administer contracts ensuring compliance with terms and conditions; and develop and recommend business solutions to day-to-day contractual challenges. Special projects are assigned in accordance with the formal Intern Training Plan, along with other assignments of similar or gradual difficulty, in order to develop the skills necessary for advancement to the target grade (DAF, 2013).

The methods of training used in the COPPER CAP program are practical on-the-job training supplemented with formal Defense Acquisition University (DAU) (in-resident and web-based) training courses and self-study. Each intern is assigned a trainer at all times. The trainer will change as the intern rotates through different contracting sections and teams. The trainer, along with the COPPER CAP supervisor, will ensure that the principles of contracting are covered with the intern. Every month, the trainer and intern are to discuss the training for the upcoming month and review the training, which took place the previous month. The trainer documents this on the monthly training accomplishment form and provides it to the COPPER CAP supervisor by the tenth working day of the month. On a monthly basis, the list of competencies is reviewed and closed out as the intern develops and demonstrates knowledge of the competency through training and experience. The intern demonstrates knowledge of the item by verbally explaining the key concepts, procedures and practices for that area or through on-the-job training work assignments accomplished. The trainer will maintain the training plan until the trainee rotates to the new contracting section and a new trainer is assigned (4th Contracting Squadron, n.d.).

On a quarterly basis, the intern will meet with the COPPER CAP supervisor to ensure all training is being conducted properly and to discuss any issues to help improve the program. Before the meeting, the intern will complete the COPPER CAP program Intern Report and submit the report to the intern coordination office. The intern supervisor will complete the COPPER CAP program Supervisory Evaluation. Both documents are filed with the intern's training records (4th Contracting Squadron, n.d.).

j. Master Development Plan

The Master Development Plan outlines the basic COPPER CAP intern program for contract specialists. The MDP serves as the primary planning document for intern development during the 36 months of training. Major commands and base points of contacts (POCs) use this document as a guide to establish current and future job-related experiences, training, and education opportunities important to the successful performance and career progression of the intern(s). The MDP outlines entry-level development and training, special projects, cross-training, etc. From the MDP, major commands will develop a flexible, but more detailed, Intern Training Plan for interns assigned under their command.

k. Intern Training Plan

The Intern Training Plan is used to document intern training and developmental activities. The ITP exists to guide the intern and trainer through the training, education, and experience needed to facilitate advancement from an entry level contracting novice, GS-07 to an intermediate level, GS-09, to the fully qualified contracting journeyman level at the target grade, GS-11 or 12. Interns are responsible for completing the basic training objectives and activities in the ITP. The plan is reviewed for conformity with the appropriate Master Development Plan. The ITP is used to identify formal training requirements for the intern, to measure intern performance against the performance plan, and to facilitate career development and progression. Intern progress is tracked according to the ITP by documenting all completed training (DAF, 1994). ITPs include: (1) a description of assigned duties, job responsibilities, training objectives, supervisor expectations, and administrative and personnel matters (2) formal classroom instruction to provide essential KSAs (3) on-the-job training to develop the

KSAs required for satisfactory completion of all program requirements (4) rotational assignments (optional) for periods of two to six months to enhance the learning experience through exposure to other functional areas within the organization and (5) administrative and managerial developmental assignments. Appendix E describes the contracting competencies required by the COPPER CAP intern to possess by graduation from the program.

l. Air Force Technical Competencies

The technical competencies on the COPPER CAP intern's Master Development Plan identifies the knowledge, skills, and abilities entry-level contracting employees must have in order to perform their contracting duties. The competencies outline the minimum requirements for the interns to function effectively in the contracting career field; however, they are encouraged to acquire a broader range of knowledge and expertise as well. Appendix E displays the COPPER CAP intern's technical competency requirements as outlined in the MDP. There are a total of thirty-two Air Force Technical Elements (AFTE), which will be used in Chapter IV to determine whether the DoD contracting competencies are covered consistently among the defense organization internship programs.

2. THE DEPARTMENT OF THE ARMY INTERNSHIP PROGRAM

a. General

The Army Civilian Training, Education and Development System (ACTEDS) is a Department of the Army program providing DA civilian employees and supervisors with a roadmap for career development. ACTEDS is a significant component of the civilian career management process, and ACTEDS plans are developed as supplements to AR 690–950, *Civilian Personnel Career Management*. The Contracting and Acquisition Career Program (CP-14) ACTEDS plan provides an orderly, systematic approach to technical, professional, management, and leadership training and development. The ACTEDS plan supports identification of the education, training, and career enhancing experiences at various stages of an employee's career that facilitate career development (DA, 2013b).

CP-14 consists of four career tracks in the Acquisition Career Field (ACF): (1) contracting (2) purchasing (3) industrial property management, and (4) manufacturing, quality assurance and production. The occupational series that CP-14 covers for contracting is 1102 (Department of the Army [DA], 2001). The CP-14 intern program, which is called the Contracting and Acquisition Management Development Program, provides highly qualified, talented, and motivated individuals an opportunity for accelerated promotions, career broadening assignments and specified training to: (1) perform effectively at the journeyman level (2) enhance eligibility to enter the Army Acquisition Corps and (3) assume leadership positions within contracting and acquisition (DA, 2013b).

b. Structure and Funding

Entry level for an intern is GS-07, and the target grade is either GS-11 or GS-12. Interns qualifying for entry as GS-1102, at the GS-07 level will normally be trained under a two or three year program, depending on the local commands' ability to support a third year. Interns hired from a vacancy announcement with a target grade of GS-11, after successfully completing the first two years are eligible for non-competitive promotion to GS-11. Those completing the third year are eligible for competitive promotion to GS-12 consistent with Merit Promotion Principles and the Merit Promotion Plan in effect for the sponsoring, placement command to which the intern is assigned after the second year. Interns hired under a vacancy announcement with a target grade of GS-12 will participate in the three-year program and non-competitively promoted to GS-12 upon meeting all performance and time-in- grade requirements. A primary recruitment source is the Outstanding Scholar program, which requires a minimum 3.5 cumulative undergraduate grade point average (GPA) or rank in the top 10 percent of the student's graduating class (DA, 2013b). The Department of the Army centrally funds the first two years of the internship program and the third year is funded by the local command.

c. Internship Coordination

The Army's internship coordination is conducted by the Activity Career Program Manager (ACPM). Their first responsibility is to ensure the selection of interns with

the appropriate qualifications and the greatest potential to complete the training program successfully. The ACPM has several other duties, which include monitoring the management, training, and the performance of interns. The intern's Individual Development Plan (IDP) and performance standards must also be approved by the ACPM. Last, the ACPM appoints other members of CP-14 to perform the sponsorship responsibilities for new interns and act as the senior rater on the intern's appraisals (DA, 2013a).

d. Intern Supervisor

The CP-14 intern supervisor is directly responsible for ensuring the CP-14 receives all four modes of training to include: formal training, participation in OJT, informal in-house training, and rotational cross training. The supervisor begins by developing the intern's IDP and performance standards using the Master Intern Training Plan (MITP) and Master Training Plan (MTP) as a guide. The supervisor assigns OJT as prescribed in the IDP, nominates the intern for formal training, coordinates rotational cross training, orchestrates informal in-house training, and ensures that nothing obstructs training attendance.

After the training is received, the supervisor evaluates whether the intern has the ability to perform contracting functions related to development and execution of government contracts, using all procurement methods. The semi-annual evaluations and annual career appraisals are used as an opportunity to counsel the intern on the quality of their performance. The supervisor is also charged with making adjustments to the MITP to provide additional experiences or training in areas where competency shortcomings are identified after the assessment. If the intern is not making satisfactory progress, the supervisor must consult with ACPM and recommend action to the Civilian Personnel Advisory Council (CPAC).

e. Mentoring

Mentoring is an important career development tool and is one means of acquiring the required knowledge, skills, and abilities to advance in CP-14. It is a process that facilitates partnerships between experienced members of an organization with less experienced individuals to enhance the associate's professional development and growth

by sharing insights and experiences. The mentoring process promotes career planning, job enrichment, and potential for advancement. While mentoring programs do not guarantee promotions, mentoring partners (mentor and associate) receive mutual benefits. The associate gets help from a person who has stood in their shoes and the mentor gains the satisfaction of helping develop high potential careerists. The intent of mentoring is to enhance opportunities for employees with the requisite interests and potential to become part of the Army leadership structure. The objective of mentoring interns is to prepare them to be the managers and executives in the future. Mentors share the knowledge and experience they have acquired over the years in order to ingrain the same knowledge, skills, and abilities into the intern (DA, 2013b).

f. Orientation

DA interns are provided with onboarding documentation which includes an orientation: (1) to government service for new government employees (2) to the mission and functions of the organization to which the intern is assigned and (3) the organization's role in the Army's acquisition mission (DA, 2013b).

g. Rotational Assignments

Rotational assignments are referred to as rotational cross training in the Army's contracting internship program. A rotational cross training assignment is beneficial to the intern's career in several ways. The most obvious benefit is that rotations afford the intern a unique chance to work in organizations that performs a variety of contracting functions, or work with organizations related to or supported by the contracting function and process. Learning through hands-on experience is a meaningful method to gain an appreciation for the practical contribution of the many competencies expected of the contract specialist. Rotations also help the intern to better understand how their role as a contract specialist fits in with the entire acquisition process (DA, 2013b).

h. Appraisals and Evaluations

The Army's method of planning and appraising performance is called the Total Army Performance Evaluation System (TAPES). The objective of TAPES is to

improve Army performance by establishing individual expectations for performance that reflect organizational goals, priorities, Army values, and employee ethics (Department of the Army [DA], 1998). The rater establishes performance objectives in TAPES based on the MITP, the IDP, and input from the intern. The performance objectives are used to evaluate the interns during the semi-annual and annual rating periods. All raters who have trained the intern during the rating period should participate in developing the objectives (DA, 2001). The performance objectives developed from the IDP will serve as the basis for the intern's appraisal. It will also reflect which competencies and skills have been acquired and how well they have been applied during the performance of work (DA, 2013b). Interns are rated six months after their entry into the position and again at the end of 12 months. This first rating (at six months) is considered a Special Rating. The first annual rating is rendered at the end of 12 months. Interns continue on their unique annual rating cycles (based on their entry into the positions) until they complete the intern program—at which time they are phased into the DA cyclic rating periods (DA, 1998).

Upon completion of the intern program, the CP-14 intern should be able to perform at the journeyman level. The intern attains these learning objectives through demonstration of an appropriate level of knowledge and skill in a certain area of training as judged by the first-line supervisor. Further, the intern will be able to demonstrate proficiency in the performance attributes and their associated competencies.

i. Master Intern Training Plan

A Master Intern Training Plan is the Department of the Army's version of a Master Development Plan. A MITP is published for the CP-14 intern and is a comprehensive plan, which outlines the training necessary to obtain the core competencies interns should possess by the time they reach their target grade. It links the competencies or knowledge, skills, and abilities required to perform at the journeyman level to the means for acquiring those competencies. The MITP is applicable to all centrally and locally funded career interns in CP-14. The plan specifies the length and type of training needed to qualify the intern, regardless of funding source, for the target position (DA, 2013b).

The Master Training Plan outlines mandatory and desired formal training and the underlying competencies obtained by completing formal Defense Acquisition University courses through Level II contracting certification. The MITP is used in conjunction with the Master Training Plan. The training, which covers all aspects of contracting and acquisition management, is reinforced through OJT, informal in-house training, rotational cross-training and individual self-development such as seeking a master's degree in a business related field of study (DA, 2013a).

The MITP provides a model template that intern supervisors use to document completion of required training, OJT, and rotational assignments that reinforce competency skill sets. At the beginning of the intern's training, an agreement called the Career Intern Agreement must be signed by the intern and the intern's supervisor. It sets forth the management and training responsibilities for both parties and identifies the Army regulations that govern the program. The agreement should be completed for each new intern within the first 30 days of employment and after the Individual Development Plan has been developed. The Career Intern Agreement template is also included in the MITP (DA, 2013b).

j. Individual Development Plan

The Individual Development Plan is developed jointly by the organization's designated CP-14 intern coordinator, the intern supervisor, and the intern. The expertise and knowledge the individual acquired prior to being hired as an intern must be considered when developing the IDP. It is essential the IDP incorporate a variety of OJT assignments to maximize exposure to the varied competencies. It must be prepared within 30 days of the intern's entrance on duty. The IDP may be used in conjunction with the intern's performance evaluation (DA, 2001). The intern needs a completed IDP, approved by the intern's supervisor, to enroll in mandatory DAU courses. The IDP must include: (1) mandatory and appropriate assignment-specific Defense Acquisition University courses (2) mandatory Civilian Leadership Training courses (3) any courses needed for assignment-specific duties immediately following the intern program (4) automation skills courses (5) self-development courses and activities and (6) a rotational OJT assignment (Department of

the Army, 2013). The IDP is reviewed periodically to gauge the progress of the intern in meeting training objectives. The IDP may be adjusted to meet the needs of the intern and conditions at the training site (DA, 2013b). Appendix F describes the technical competencies required of CP-14 interns.

k. Department of the Army Technical Competency Requirements

The technical competencies needed by Army contracting entry level employees to function effectively in their target positions are derived from the Master Intern Training Plan (DA, 2013a). The interns must show that they can function effectively in the contracting career field by demonstrating the knowledge, skills, and abilities outlined by the technical competencies. Appendix F displays a total of 80 Army Technical Elements (DATE), which will be used in Chapter IV to determine whether the DoD contracting competencies are covered consistently among the defense organization internship programs.

3. THE DEPARTMENT OF THE NAVY/MARINE CORPS ACQUISITION INTERNSHIP PROGRAM

a. General

The Naval Acquisition Intern Program is a highly competitive three-year developmental program that attracts outstanding college graduates from a variety of academic disciplines and career paths. The NAIP places the interns into entry-level acquisition positions and provides them with structured mentoring, rotational assignments, and training over a three-year period. The program provides participants the opportunity for career broadening assignments and rapid advancement (Department of the Navy [DoN], 2011). NAIP was established on October 1, 1992 by the Defense Acquisition Workforce Improvement Act, (10 U.S.C. § 1701–1764) and built upon earlier career development programs dating back to 1974. The program has three key objectives: (1) to improve recruiting through advertising and outreach by providing an early career development experience that is particularly attractive to high-quality prospective employees (2) to improve early career professional development and ensure that new employees receive the training they need to quickly advance to senior-level positions and (3) to improve retention among

new hires (Gates et al., 2009). The purpose of NAIP is to develop skilled contracting personnel to meet the Navy's projected procurement workforce requirements in the future (Department of the Navy [DoN], 2012).

b. Structure and Funding

The NAIP employee is assigned to a specific Navy command's acquisition organization, which is designated as the homeport. The homeport is the location of the member's targeted position upon completion of the program. It is a centrally funded, three-year training program executed for the Director, Acquisition Career Management by the Naval Acquisition Career Center. Under the leadership of its Director, NACC is responsible for the provision of NAIP guidance and oversight so that homeports can provide the intern with complete support. NACC Division Heads are for will be qualified for journeyman-level acquisition workforce positions (GS-12) by the end of the internship (DoN, 2012).

c. Internship Coordination

Each intern is assigned a NAIP coordinator called the homeport Career Field Manager (CFM). The CFM is the subject-matter expert as it pertains to an intern's training and technical requirements for graduation from the program. The CFM is responsible for ensuring all aspects of the program are completed prior to graduation. The CFM has many other responsibilities, which take place before, during and after the intern arrives to facilitate successful completion of the program (DoN, 2012). The pivotal nature of the CFM's role cannot be emphasized enough. The CFM must meet certain criteria and qualifications, which include being a senior-level civilian, certified in level III contracting, located in the same geographical area as the intern (DoN, 2012).

d. Intern Supervisor

The NAIP intern's homeport and rotational supervisors are the individuals responsible for all normal supervisory and administrative duties. They provide performance information for interim and annual performance reviews as well. The CFM can also function as the employee's supervisor. In those cases, the employee's homeport supervisor must also be a senior career field civilian and Level III certified in contracting (DoN, 2012).

e. Mentoring

Each NAIP intern is assigned a mentor. The mentors are volunteers and typically not in the employee's chain-of-command in order to maintain confidentiality. They are forthcoming with information; providing non-formal career guidance and honest, open answers to the intern's questions. Mentors should be knowledgeable of the NAIP's organization, the contracting career field, and understand the uniqueness of a mentor relationship (DoN, 2012). An important component of NAIP's leadership development effort is the mentorship support during the internship.

f. Orientation

The NAIP interns are required to complete new employee orientation by logging onto a web-based training portal used by the DoN called the Total Workforce Management Services (TWMS). The intern undergoes two types of training: (1) command orientation and (2) contracting career field specific initial orientation (DoN, 2012).

g. Communication

The NACC relays information to its personnel and the NAIP interns via the NACC Bulletin Board. NACC employees are required to check the bulletin board daily for new messages and items requiring action. They are also authorized to post information to the bulletin board. The NACC also maintains a website with information relative to the NAIP. It contains policy and guidance, in addition to samples of all required forms. Links are available relating to the acquisition career field and to employee items of interest (DoN, 2012).

h. Rotational Assignments

A rotational assignment is a non-permanent, planned assignment to a different supervisor and/or job for a specific period with an ending evaluation of the results. The rotational assignment is a requirement of the Master Development Plan and the MDP provides general guidance as to the type of assignments (DoN, 2012). Navy contracting interns participate in two types of rotational assignments, internal and external. Internal rotations are performed at or near the homeport at no additional cost.

They are intended to familiarize the employee with how the organization works at the program level. The learning objectives focus on how the various parts of the Navy, Office of the Secretary of Defense and other federal government agencies interact with each other, industry, regulatory bodies, and research organizations (DoN, 2012). External rotations take the employee outside the functions of the normal duties of their assigned position and introduce them to the full array of professional duties and disciplines that work together to support the Navy's mission. The external rotation does not have to be outside of the homeport as long as it takes the employee out of their normal work duties and assignments (DoN, 2012).

Rotational assignments must be challenging, comprehensive, hands-on learning experiences directly related to achieving proficiency in the career field competencies and are not to be used for filling manpower vacancies or primarily performing clerical work. The rotations are at least thirty days long with a maximum length of ninety days (DoN, 2012). Characteristics of a successful rotational assignment for interns include: (1) an active involvement in tasks that were meaningful and related to career field requirements in the IDP competencies (2) opportunities to meet with senior leadership and (3) a rotational assignment supervisor that is aware of the rotational assignment objectives and is readily available to the interns (DoN, 2012).

i. Appraisals and Evaluations

Like all civil service employees, NAIP interns are given a mid-point and annual performance appraisal. Intern supervisors and interns are instructed on how to develop performance plans that reflect an understanding of how their performance contributes to the Department's mission and success of the defense acquisition system. Performance plans and appraisals for interns should include DAWIA program goals and requirements such as certification and continuous learning (DoN, 2011). During the mid-point appraisal, the annual performance appraisal and any informal feedback sessions throughout the evaluation period, the intern supervisor is charged with addressing any of the intern's performance shortfalls. Subsequent advice regarding corrective actions should also be provided by the intern's supervisor.

j. Master Development Plan

The Master Development Plan is used for the NAIP interns. It contains the minimum education and proficiency levels required for the career field and it is developed by the DoN Career Field Functional Board. The MDP for entry level employees is a multi-page excel document and is for use at the local command only. The MDP becomes an Individual Development Plan once it is filled out and tailored to an individual. It contains (1) DAWIA training requirements (2) formal training requirements (3) required competencies (4) rotational assignments and a required (5) senior project (as applicable) (DoN, 2013).

Commands may increase required proficiency levels, as stated in the MDP, and/or add areas for specific target position needs, but MDP requirements may not be reduced or eliminated. Employees are required to complete the MDP in order to graduate from the program. The command will identify those training requirements that the entry-level contract specialist must complete to meet the criteria for accelerated promotion in six months versus 12 months. The MDP describes desired education at DAWIA Level I, Level II and the mandatory education requirement for the Acquisition Professional Community (DoN, 2012).

k. Individual Development Plan

The Individual Development Plan is a personalized version of a MDP designed to meet the specific needs of the target position and employee. Within forty-five days of hiring, a team consisting of the employee and homeport supervisor and/or CFM reviews and identifies the first year of the intern's performance requirements. The IDP should be reviewed annually with the intern's supervisor and/or CFM. The IDP is kept on file at the homeport command. The IDP includes detailed descriptions with dates, durations and locations of: homeport assignment; rotational assignments at other locations; the competencies, skills and other requirements to be attained through each detailed assignment; DAU courses; technical training; and college/university graduate level courses. The IDP does not need to be filled out for the entire program length but should be continuously reviewed to ensure it fits the needs of the homeport and the

intern. The NAIP IDP Summary is a one page summary of the IDP that lists all graduation requirements for the interns. The NAIP Interns are required to complete the NAIP IDP Summary with the supervisor and/or CFM (DoN, 2012). Key elements that should be identified in the IDP are short and long term goals, estimated and actual timeframes for goal completion, development objectives, and training opportunities. The intern and the intern's supervisor are required to sign the IDP after it is created.

The IDP should outline the specific path to achieve education requirements, certification requirements, and desired professional competencies required of the individuals' developmental and targeted positions. It should identify appropriate education, training, and experiential assignments that must be completed at realistic milestones such that progress can be tracked and measured. After the IDP is established and the intern begins pursuing some of the developmental milestones, the intern should meet with their supervisor at regular intervals to discuss progress towards their goals and refine their IDP as necessary (DoN, 2011).

l. Navy Technical Competencies

The technical competencies on the NAIP intern's Master Development Plan identifies the information and skill base that contracting entry level employees must have in order to function effectively in their target positions. The competencies outline the minimum requirements for the interns to function effectively in the contracting career field, however, they are encouraged to acquire a broader range of knowledge and expertise as well (DoN, 2013). Appendix G displays the NAIP intern's technical competency requirements as outlined in the MDP. There are a total of seventy-one Navy Technical Elements (NTE), which will be used in Chapter IV to determine whether the DoD contracting competencies are covered consistently among the defense organization internship programs.

E. SUMMARY

Training and developing new entrants into the defense acquisition workforce is a crucial part of meeting the armed services mission needs and is the foundation for building the DoD's acquisition leadership of the future. This chapter introduced the DoD

contracting competencies that contracting interns are required to possess prior to graduation. The chapter presented the defense internship program's inherent characteristics such as providing civil service employment benefits and the current Defense Acquisition Workforce Improvement Act certification requirements. The chapter provided a comprehensive overview of the Departments of the Army, Air Force and Navy/Marine Corps' contracting internship programs. In the next chapter, the information presented in this chapter will be used to analyze each defense internship programs in comparison to the DoD contracting competencies and the industry best practices with the goal of identifying and recommending areas of improvement.

IV. COMPARATIVE ANALYSIS RESULTS

A. INTRODUCTION

This chapter provides a comparative analysis of the defense organizations' contracting internship programs to DoD contracting competencies and to best practices of private industry internship programs identified in the literature review. The objective of the comparative analysis is to determine the inconsistencies between contracting competencies within each defense organization's internship program compared to the DoD contracting competencies and determine the degree industry best practices are incorporated within each defense organization's internship program. The assessment categories are derived from industry best practices. An assessment rating scale was developed to measure the degree that best practices are currently reflected in the defense programs. The chapter provides the analysis methodology, assessment categories, the methodology limitations, the assessment ratings, the internship program assessments, and the summary of findings.

B. ANALYSIS OF TECHNICAL COMPETENCIES

1. Analysis Methodology

A comparative analysis of the defense organizations' contracting internship program competencies to DoD contracting competencies was conducted in an effort to determine if there is consistent coverage of the DoD technical competencies among the defense organizations. The analysis began by identifying the technical competencies listed on the DoD Contracting Competency Model, as shown Appendix B, and comparing them with the technical competencies required of interns from each defense internship program prior to graduation. The Air Force's technical competency requirements are shown in Appendix E, the Army's in Appendix F, and the Navy's requirements are shown in Appendix G. Each of the technical elements on the internship program lists were given alphanumeric identifiers as follows: (1) Air Force technical elements are AFTEs (2) Army technical elements are DATEs and (3) Navy technical elements are NTEs. A comparison chart listing the technical competencies from the DoD Contracting

Competency Model on the left and the defense organization names across the top was created to facilitate a side-by-side comparison to identify which DoD technical competencies were included in the defense organizations internship programs. The alphanumeric identifier was referenced and one point assessed each time a DoD technical competency was included as a defense organization required competency. If more than one reference to a specific DoD technical competency was identified on the defense organizations' competency listing or a DoD technical competency was segmented into multiple technical elements, then a point was assessed for each separate reference or technical element. Accordingly, *associated tasks* on the Navy technical competency listing (Appendix G) were each assessed individual point values if they could be categorized under a DoD Technical Competency because many of the Navy's technical elements are generic. For example, NTE-66 is "Ability to prepare and issue:" this element is very generic and the associated tasks must be referred to in order for the technical element to be categorized appropriately. The tasks associated with a generic technical element, like NTE-66, could then be categorized under multiple technical competencies if applicable.

2. Technical Competency Ratings

The Technical Competency Comparison Chart is shown in Appendix H. The points for each defense organization's point value column were totaled and the internship program given an overall rating. The overall rating is used in (1) a side-by-side comparison of each internship program and (2) in an assessment of the defense internship programs as a whole. Both assessments are used to identify whether the DoD technical competencies are covered consistently across each defense internship program and are used to identify recommended defense internship improvements.

It is in the Department of Defense's best interest to cover contracting technical competencies consistently. However, the comparative analysis shows that the defense organizations' coverage of contracting technical competencies is inconsistent. To illustrate this assertion, the ten technical competence units shown in the DoD Contracting Competency Model (Appendix B) and in Appendix H were categorized into one of three

subsets. The subsets are loosely based on the three phases of the contract management process, which are the Pre-Award Phase, the Award Phase, and the Post Award Phase (Garrett, 2006). The subsets are (1) Contract Pre-Award/ Award (2) Contract Administration and (3) Miscellaneous Technical Competencies. The Contract Pre-Award/ Award subset is comprised of the following units of technical competence (1) Pre-award and Award (2) Develop and/or Negotiate Positions and (3) Advance Cost and/or Price Analysis. The Contract Administration subset is comprised of only the Contract Administration unit of technical competence. Finally, the units of technical competence that encompass the Miscellaneous Technical Competencies subset are (1) Small Business/Socio-Economic Programs (2) Negotiate Forward Pricing Rate Agreements (FPRAs) & Administer Cost Accounting Standards (3) Contract Termination (4) Procurement Policy (5) Other Competencies and (6) Contracting in a Contingent Environment. Appendix H, the Technical Competency Comparison Chart and Appendix I, the Technical Competency Graphs, present the defense organization internship programs' competency coverage assessments. The sections below provide a detailed explanation of the assessment findings.

a. Air Force Internship Program

The comparative analysis reveals that there is a large disparity between the Air Force's technical competency coverage and the baseline DoD contracting technical competencies. The Air Force COPPER CAP interns appear to focus primarily on the Contract Pre-Award/Award subset of technical competence units. The Air Force Technical Elements within those units account for 71.9% of the technical competencies in which COPPER CAP interns must demonstrate proficiency prior to graduation. Clearly, much of the Air Force's training emphasis is applied to the pre-award and award phases of the contract management process.

The analysis further reports that COPPER CAP intern training and assigned tasks related to contract administration encompasses only 12.5% of their required technical competencies. In contrast, an estimated one-third of the tasks associated with the contract management process are categorized in the contract administration domain.

The Miscellaneous Technical Competencies subset accounts for 15.6% of COPPER CAPs competency demonstration requirements, which is in stark contrast to the Army's 2.6% and the Navy's 5.6% competency apportionments to the same subset almost half of the subset's 15.6% focuses on addressing small business concerns and learning about socio-economic programs. The Air Force does not require any demonstration of technical competence in the following areas contained within the Miscellaneous Technical Competencies subset: (1) Negotiating Forward Pricing Rates Agreements & Administering Cost Accounting Standards (2) Procurement Policy (3) Activity Program Coordinator for Purchase Card and (4) Contingency Contracting.

b. Army Internship Program

The comparative analysis reveals that the Army's coverage of the DoD contracting competencies scored over twice the amount as the Air Force. The Army gears the bulk of its contracting interns' tasks and training, an estimated 71.8%, towards achieving technical competency in the Contract Pre-Award/Award subset. Over half of the points assessed in the subset were earned in the Army technical elements areas of (1) Determination of How Best to Satisfy Requirements for the Mission Area (2) Source Selection Planning (3) Solicitation of Offers and (4) Proposal Evaluation.

The analysis further reports that contract administration encompasses 25.6% of the technical competencies that Army interns are required to demonstrate. The percentage is the highest of the three defense organizations' as the Air Force is 12.5% and the Navy tops 18.8%.

The Miscellaneous Technical Competencies subset accounts for only 2.6% of the Army intern's competency demonstration requirements.

c. Navy Internship Program

The comparative analysis reveals that the Navy's coverage of the DoD contracting competencies far exceeds that of the other defense organizations, at nearly double the amount assessed the Army and quadruple the Air Force. The Navy, like its defense organization counterparts, structures the vast majority, 75.7%, of its intern's

training-related tasks around achieving technical competency in the Contract Pre-Award/Award subset. A total of 98 out of 144 Navy Technical Element points assessed were earned in the Pre-Award and Award technical competence unit.

The analysis further reports that Contract Administration encompasses only 18.8% of the technical competencies that Navy interns are required to demonstrate. Most of the Navy's contract administration technical competency requirement involves contract performance management tasks such as understanding contractor/subcontractor performance reports, final settlements, and contract close-outs.

Last, the Miscellaneous Technical Competencies subset accounts for 5.6% of the NAIP intern's competency demonstration requirements. The Navy was assessed points for preparing the interns to negotiate forward pricing rate agreements, but required no demonstration of technical competence in the areas of procurement policy, E-Business and automated tools, or contingency contracting.

C. ANALYSIS OF INDUSTRY BEST PRACTICES

1. Best Practice Assessment Categories

The assessment categories are derived from the industry best practices that are detailed in Chapter II. In an effort to increase readability, the best practice titles used in Chapter II were modified when converted into assessment categories below. For example, the best practice titled "Conduct an Internal Audit and Prepare a Support Structure for the Interns" was altered to read "Structure and Funding." However, the best practice descriptions used in Chapter II remain unchanged. It is important to note that the summarizations that follow each assessment category are phrased as questions and are used to guide the rating assessment on the degree of best practice implementation. The assessment categories and their corresponding industry best practices are identified as follows:

a. Structure and Funding

Conduct an internal audit and prepare a support structure for the interns. Prior to the start of the internship program, is an organizational audit conducted and structures put in place to support the interns throughout the duration of the internship?

b. Executive/Staff Involvement

Encourage executive level and staff level involvement. Is there internship support and involvement from the staff and at the executive level?

c. Position Descriptions

Write a position description. Is there a written position description that identifies the intern's primary responsibilities and specific tasks to be performed during the internship?

d. Training and Development Plan

Write a training and development plan. Is there a development plan established that identifies the intern's learning goals, lays out a plan of action for achieving the goals, requires job-related training, and assesses the intern's progress?

e. Orientation/Onboarding

Conduct orientation. Is there an onboarding process or an orientation provided to the interns?

f. Tasks Related to Learning Objectives

Assign challenging tasks and projects. Do the assigned tasks contribute to the intern's learning objectives?

g. Internship Coordination

Assign an internship coordinator. Is there an internship coordinator designated for the program?

h. Intern Supervision

Assign a supervisor. Is each intern assigned a supervisor?

i. Mentoring

Assign a mentor. Is each intern assigned a mentor to help support, guide and develop them into an effective member of the organization?

j. Rotational Opportunities

Provide rotational opportunities. Are there rotational opportunities offered to expose the intern to different areas of an organization and provide the broadest learning experience?

k. Intern Communication Methods

Provide an intern handbook and website. Are communication methods used to disseminate information relevant to the interns such as a website, newsletter or bulletin board?

l. Relocation Assistance

Provide housing and relocation assistance. Does the defense organization offer a stipend or subsidy for housing or pay for the intern to relocate to the job site?

m. Compensation and Benefits

Offer compensation and benefits. Are the interns monetarily compensated? Are benefits and incentives also provided?

n. Skills-Building Opportunities

Offer training and skills-building classes. Does the organization offer internal and external training opportunities to help develop the intern's job-related skills?

o. Showcasing Intern Work

Showcase intern work through presentations and expositions. Does the organization provide interns with a forum to showcase their accomplishments or innovative ideas?

p. Flexible Work Schedules

Offer flexible, part-time or compressed work schedules. Does the organization offer flexible work schedules to its interns?

q. Performance Feedback

Provide continuous feedback. Are the interns provided with formal and informal feedback on their performance?

r. Ending the Internship

Off-board at the end of the internship. Is there an off-boarding process in place at the end of the internship? Are full-time positions offered to the interns at the end of the internship? Are interns asked to provide feedback on the program's effectiveness?

2. Analysis Methodology and Limitations

An analysis of the extent to which the industry best practices is currently implemented in defense organization internships was conducted. The analysis methodology is based on the research technique called content analysis. Bernard Berelson defined content analysis as a systematic research technique for the quantitative and objective description of manifest content of communications (Berelson, 1952). Systematic means that the inclusion or exclusion of categories must be consistent and quantitative means measuring the emphasis or omission of any category (Kassarjian, 1977). Content analysis is used to determine the presence of certain words, concepts, phrases, or sentences in written or verbal communications and to quantify this presence in an objective manner. The content of the text is first analyzed, the text is then coded, or broken down, into manageable categories, and then it is examined and quantified (Berelson, 1952).

The coding scheme used is the directed approach to content analysis because guidance for the codes is derived from relevant research findings. Specifically, the coding or assessment categories are derived from the industry best practices identified in Chapter II. The content being analyzed in this research is the reference material used to provide a comprehensive overview of the defense internship programs in Chapter III. The coder, who is the thesis author, reviewed the reference material for the presence of the words, phrases, sentences and concepts of industry best practices. The content was then quantified by documenting the inclusion and omissions of the assessment category (best practice) in the reference material. The result of the coder's informed and objective quantification method is documented in the assessment rationale column of the Best Practice Comparison Chart shown in Appendix L. The cumulative of the inclusions or omissions for each category were then tallied and assigned a numerical rating, which are explained in Appendix J.

There are limitations to this analysis methodology and consequently a margin of error exists. The assessment rationale is generated from the comprehensive defense internship program overview presented in Chapter III. The assessment rationale is limited to the written materials referenced in the Chapter III. The research focuses solely on the analysis of pertinent reference material. Conducting interviews was not within scope of the research. Thus, the coder's assessment rationale and the resulting assessment rating may not be a complete depiction of a defense internship program's procedures in any given assessment category. Another rating limitation is that military commands are allowed some variation in the way the contracting internship programs are conducted. Different commands have different missions and tailor the intern's training and IDP accordingly. Military command flexibility is necessary, but nevertheless presents a limitation in the defense internship program's overall assessment. Therefore, it is reiterated that the assessment rationale is based on the available reference materials used to guide the overarching defense internship programs and not guidance that is command specific.

3. Assessment Rating Scale

A mix of qualitative and quantitative factors was used to develop an informed and objective analysis method. The assessment rating scale ranges from zero through four and is based on a set of criteria presented in Appendix J. Zero represents the lowest degree of implementation and number four represents the highest degree of implementation. A written definition accompanies each number in the rating scale under the assessment column. The three defense organization's internships were rated in each assessment category. The score for each defense internship program was totaled and the program given an overall rating. The overall rating is later used in (1) a side-by-side comparison of each program and (2) in an assessment of the defense internship programs as a whole. Both assessments are in relation to implementation of industry best practices and will be used to identify recommended defense internship improvements.

The premise is that the defense organization internship program with the highest assessment score is more effective because industry best practices are currently implemented to a greater degree. It is important to note that the analysis is not attempting to grade the defense internship program's effectiveness at producing contracting interns that are well-trained and technically proficient, but rather grade the extent to which the programs are currently implementing the best practices of private industry internships. The assumption is that a higher degree of best practice implementation leads to more effective defense internship programs and, in turn, results in an increased number of well-trained and technically proficient contracting professionals.

4. Fully Implemented Best Practices Common to All Internship Programs

a. Inherent Characteristics

The best practices identified in this section are established and fully implemented into each defense internship program. The Chapter III, Section C titled, "Defense Internship Programs Inherent Characteristics" introduced the characteristics related to industry best practices that are inherent and universally applicable to all of the defense internships because they are civil service and acquisition workforce positions.

Appendix K shows the inherent characteristics, their corresponding assessment categories and industry best practices. These inherent characteristics are applicable and administered equally for each defense internship program based on their governing federal policy guidance.

The assessment categories below are also deemed fully implemented into the defense internships programs based on the following:

b. Structure and Funding

Conduct an internal audit and prepare a support structure for the interns. The overviews of the three defense internship programs in Chapter III each include a section titled "Structure and Funding." The sections detail how each internship is funded and structured to support the interns throughout the duration of the internship. Based on the research, each defense organization has full cognizance of the need to have the staff, physical resources, and financial resources to support an internship program. The referenced materials used in the overviews provide clear evidence that each internship program is supported both programmatically and financially. Thus, the best practice is fully implemented and rated equally for each defense internship program.

c. Executive/Staff Involvement

Encourage executive level and staff level involvement. The Under Secretary of Defense for Acquisition, Technology and Logistics oversees each of the DoD organizations' acquisition workforce activities including contracting internships. Each defense organization has a director for acquisition career management. For example, the Department of the Navy Director, Acquisition Career Management is the Navy and Marine Corps' lead for the professional development and management of the DoN acquisition workforce. The DACM is the primary advisor and staff assistant to the Assistant Secretary of the Navy for Research, Development, and Acquisition. The DACM represents the Assistant Secretary and the Principal Civilian Deputy Assistant Secretary for Research, Development, and Acquisition in all issues related to initiatives and efforts to improve the acquisition workforce through education, training, and career management (Assistant Secretary of the Navy, 2013). The Departments of the Army and

Air Force DACMs also have the same mission. The best practice is fully implemented because management of each program begins from the highest echelons of government, thus, it is also inherent that the defense internship programs receive support and involvement from senior leadership.

The best practice also suggests that it is beneficial for organizations and interns to bring professionals in from the executive ranks to speak with interns. There is evidence that the defense internships have implemented this aspect of the best practice as well. For example, the Air Force policy guidance references the opportunity for COPPER CAP interns to interact with senior leaders each year by attending the *COPPER CAP Leadership Workshop* hosted by the COPPER CAP program office. The workshop provides training to future leaders and meetings with Senior Contracting Leaders (DAF, 2011).

d. Tasks Related to Learning Objectives and Skills-Building Opportunities

Assign challenging tasks and projects and offer training and skills-building classes. The defense internship overviews in Chapter III include a discussion on the Air Force's Master Development Plan and Intern Training Plan, the Army's Master Intern Training Plan and Individual Development Plan, and the Navy's MDP and IDP. The plans are all used to document the completion of the intern's training and developmental activities. They have the similar objective of guiding the interns and supervisors through the training, education and experience needed to become fully qualified contracting journeyman at the target grade level. The research concludes that the plans typically include: (1) mandatory and assignment-specific Defense Acquisition University courses (2) Civilian Leadership Training courses (3) any courses needed for assignment-specific duties immediately following the intern program (4) automation skills courses (5) self-development courses and activities and (6) rotational OJT assignment (DA, 2013b).

Both best practices are fully implemented because the plans all have assigned tasks that contribute to the intern's learning objectives and build their skill sets. The tasks help the intern acquire the competencies required to develop and recommend

acquisition and sourcing strategies for supplies and services, solicit, evaluate, negotiate, and recommend award of procurements; analyze and evaluate cost or price proposals; administer contracts to ensure compliance with terms and conditions; and develop contractual business solutions. Additionally, the defense organizations offer internal and external training opportunities to help develop the intern's job-related skills.

e. Internship Coordination

Assign an internship coordinator. Each defense organization has an internship coordination office. The defense internship overviews in Chapter III discuss each program office charged with coordination of the internships to include the Air Force's PALACE Team, the Army's Activity Career Program Manager and the Navy's Career Field Managers.

f. Intern Supervision

Assign a supervisor. This best practice is fully implemented because according to the research discussed in Chapter III, each defense organization assigns a supervisor to the contracting interns. The supervisors have several responsibilities. They normally begin by developing the intern's training and development plan using the ITP and IDP as a guide. The supervisor assigns OJT as prescribed in the IDP, nominates the intern for formal training, coordinates rotational cross training, orchestrates informal in-house training, and ensures that nothing obstructs training attendance.

After the training is received, the supervisor evaluates whether the intern has the ability to perform contracting functions related to development and execution of government contracts, using all procurement methods. The semi-annual evaluations and annual career appraisals are used as an opportunity to counsel the intern on the quality of their performance. The supervisor is also charged with making adjustments to the training plans to provide additional experiences or training in areas where competency shortcomings are identified after the assessment (DA, 2013b).

g. Performance Feedback

Provide continuous feedback. This best practice is fully implemented because all of the defense organizations provide their interns with formal and informal feedback on their performance. For example, COPPER CAP interns receive initial 90-day appraisals, quarterly evaluations, which become semiannual after the first year, and annual appraisals (DAF, 1994). Based on the research the process for the defense organizations is that the supervisor's establish critical objectives for the intern's performance evaluation for a semi-annual and annual rating period based on the training plan and input from the intern. The intern's appraisals reflect which competencies and skills have been acquired and how well they have been applied to assigned duties (DA, 2013b).

h. Ending the Internship

Off-board at the end of the internship. This best practice is fully implemented because all of the defense organizations offer full-time positions to the interns that successfully complete the programs at the end of the internship. For example, paragraph 3.13 of the COPPER CAP regulation AFI 36–602 states in part that major commands "identify a permanent, locally funded position for interns within six months of the intern's projected graduation date." (DAF, 1994) According to the COPPER CAP MDP the program policy for outplacement is to place the intern where they are trained. However, the defense interns are required to sign a mobility agreement at the beginning of the internship, which basically states that the intern agrees to relocate if a permanent position cannot be offered at their main training location. Last, at the end of the COPPER CAP internship:

> The PALACE Team issues an AF 3518, USAF Civilian Intern Program Certificate of Completion, to all interns who successfully complete training. The PALACE Team issues the certificates of completion to the MAJCOMs for presentation at an appropriate ceremony by the senior field functional official. (DAF, 1994, p. 22)

On the grounds established herein, the characteristics identified in this section are given an assessment rating of four, which means the applicable assessment category and corresponding best practice is fully implemented into each of the defense internship programs.

5. Best Practice Ratings

The purpose of this content analysis is to compile cross-comparative data for all of the defense organization internship programs and private industry best practices. An assessment summary of the programs is provided as a result of the data compilation. It is important to reiterate that these ratings result from quantifying the extent to which industry best practices are currently reflected in the defense internships' operational and policy guidance materials. Appendix L, The Best Practice Comparison Chart, presents the individual defense organization internship program assessments and the overall assessment scores. The sections below are the reference paragraphs used in the assessment rationale column for each defense organizations' ratings.

a. Air Force Internship Program

(1) Orientation/Onboarding

This best practice is fully implemented and the assessment category is rated a four because four or more paragraphs were found in the reference material regarding COPPER CAP interns receiving orientation. Thesis Chapter III, D (1) (f) discusses the details of the COPPER CAP New Employee Orientation course that is taken by the interns upon entry into the program.

(2) Mentoring

This best practice is found to be ineffectively implemented and the assessment category is rated a one because only a passing reference, mention of, or isolated usage was found in the reference material regarding mentoring for COPPER CAP interns. According to AFI 36–602, COPPER CAP interns may be assigned a mentor or the responsibilities of mentorship may be assigned to the intern's supervisor.

(3) Rotational Opportunities

This best practice is found to be partially implemented and the assessment category is rated a two because only one to two paragraphs were found in the reference material regarding rotational opportunities for COPPER CAP interns. The COPPER CAP Master Development Plan states that a majority of the intern's training will come from performing contract specialist duties during the course of on-the-job training

and rotational assignments (DAF, 2011). Intermittent references to the assessment category were found in AFI 36–602, however, the most substantial reference is in paragraph 2.18.2, which states Training and Development plans include "Rotational assignments (optional) for periods of two to six months to enhance the learning experience through exposure to other functional areas within the organization" (DAF, 1994).

(4) Relocation Assistance

According to the research, this best practice is found to be ineffectively implemented and the assessment category is rated a one because only a passing reference, mention of, or isolated usage was found in the reference material regarding relocation assistance COPPER CAP interns. AFI 36–602, Attachment 1 - CONDITIONS OF EMPLOYMENT AGREEMENT states Air Force interns may be required to accept assignments to other positions, "including assignment to different geographic locations. Normally, these moves will be at government expense" (DAF, 1994).

(5) Intern Communication Methods

According to the research, this best practice is not implemented and the assessment category is rated a zero because no evidence was found in the reference material regarding methods of communicating with the interns such as a website, bulletin board, or newsletter.

(6) Showcasing Intern Work

According to the research, this best practice is not implemented and the assessment category is rated a zero because no evidence was found in the reference material regarding methods of showcasing COPPER CAP intern's innovative ideas such as a forum, exposition or presentation.

b. Army Internship Program

(1) Orientation/Onboarding

This best practice is fully implemented and the assessment category is rated a four because four or more paragraphs were found in the reference material regarding the Army contracting interns receiving orientation. The CP-14 interns

receive four types of training: formal, on-the-job, informal in-house and rotational cross training. The orientation session is part of the informal in-house training and its purpose is to provide basic information about the organization and the contracting career field. According to the Army MITP, orientations are designed to help the intern understand the contracting organization's role, and how the organization fits into the of the Army's structure (DA, 2013a).

(2) Mentoring

This best practice is fully implemented and the assessment category is rated a four because four or more paragraphs were found in the reference material regarding CP-14 intern mentorship. SECTION XI of the Army Civilian Training, Education, and Development System Plan for the CP-14 contracting and acquisition career field discusses the intern mentorship program in detail. The Army also has a general guide, used in conjunction with ACTEDS Plan, for conducting the mentoring program called DA Pam 690–46 *Mentoring for Civilian Members of the Force* (DA, 2013b).

(3) Rotational Opportunities

This best practice is fully implemented and the assessment category is rated a four because four or more paragraphs were found in the reference material regarding rotational opportunities, which is used to reinforce the development of required competencies for CP-14 interns. Thesis Chapter III, D(2)(g) discusses rotational assignments for CP-14 interns. As stated previously, rotational cross training is one of the four modes of training the CP-14 interns receive training. The MITP details the purpose, benefits and specific locations available for rotational opportunities.

(4) Relocation Assistance

According to the research, this best practice is found to be ineffectively implemented and the assessment category is rated a one because only the concept was found in the reference material regarding relocation assistance for CP-14 interns. The Army Contracting Command (ACC) CP-14 Intern Guide extensively discusses the mobility agreement that the interns are required to sign. Based on the reference material, but not explicitly stated, the insinuation is the moves are at the government's expense.

(5) Intern Communication Methods

According to the research, this best practice is not implemented and the assessment category is rated a zero because no evidence was found in the reference material regarding methods of communicating with the CP-14 interns such as a website, bulletin board, or newsletter.

(6) Showcasing Intern Work

According to the research, this best practice is not implemented and the assessment category is rated a zero because no evidence was found in the reference material regarding methods of showcasing CP-14 intern's innovative ideas such as a forum, exposition or presentation.

c. Navy Internship Program

(1) Orientation/Onboarding

This best practice is fully implemented and the assessment category is rated a four because a review of the reference material indicates that NAIP interns are required to take comprehensive orientation training upon entry into the program. As recalled in thesis Chapter III, D(3)(f) the NAIP interns are required to complete new employee orientation by logging onto a web-based training portal used by the DoN called the Total Workforce Management Services. The intern undergoes two types of training: (1) command orientation and (2) initial orientation into the contracting career field (DoN, 2012).

(2) Mentoring

According to the research, this best practice is found to be partially implemented and the assessment category is rated a two because only one paragraph and some isolated usage was found in the reference material regarding mentorship of NAIP interns. Paragraph 3.6 of the Naval Acquisition Development Program (NADP) Operating Guide stated that a mentor is "A volunteer, normally not in the employee's chain-of-command, who provides honest, open answers to employee questions and non-formal career guidance; maintains confidentiality; is knowledgeable of NADP organization and career field; and understands the uniqueness of a mentor relationship." (DoN, 2012,)

(3) Rotational Opportunities

This best practice is fully implemented and the assessment category is rated a four because four or more paragraphs were found in the reference material regarding rotational opportunities for NAIP interns. Thesis Chapter III, D(3)(h) provides a synopsis of rotational assignments detailed in section 6.4 of the NADP operating guide.

(4) Relocation Assistance

This best practice is found to be ineffectively implemented and the assessment category is rated a one because only the concept was found in the reference material regarding relocation assistance for NAIP interns. The NADP operating guide briefly mentions the requirement for interns to sign a mobility agreement in paragraph 5.1.7. The implication is that the moves are at government expense but the reference material does not explicitly state that.

(5) Intern Communication Methods

This best practice is fully implemented and the assessment category is rated a four because four or more paragraphs were found in the reference material regarding communication with NAIP interns. Thesis Chapter III, D(3)(g) synopsized section 4.2 of the NADP operating guide, which states that Naval Acquisition Career Center provides information to the staff and to the interns via the NACC Bulletin Board. The NACC personnel and interns must check the bulletin board every day for new messages and items requiring action. NACC personnel are also authorized to post information to the bulletin board. The NACC also maintains a website with information relative to the NAIP. It contains policy guidance and samples of required forms. Acquisition career field and employee items of interest links are available (DoN, 2012).

(6) Showcasing Intern Work

This best practice is effectively implemented and rated a three because three paragraphs were found in the reference material regarding this assessment category. Section 6.5 of the NADP Operating Guide discusses the submission of the NAIP intern senior project. Completion of a senior project is a Naval Acquisition Intern Program

graduation requirement. The project demonstrates the intern has attained the necessary contracting career field competencies and business perspective of Naval Acquisition (DoN, 2012). The NAIP MDP states that there is no set format for the senior project and it may vary in scope. The senior project is typically a presentation of a paper completed for a training class; a presentation on an acquisition issue researched by the intern or a presentation on a special assignment. The presentation is made to Assistant Secretary of the Navy (Research, Development and Acquisition) or designee (DoN, 2013).

D. SUMMARY OF FINDINGS

The chapter began with a comparative analysis of defense organizations' contracting internship programs and DoD contracting competencies in order to determine if there are any inconsistencies in the defense organizations' coverage of DoD technical competencies. The assumption is that the same level of technical competency coverage is needed for contracting interns throughout the DoD, but as the comparative analysis in Appendix H shows, there is inconsistency between the defense organizations' current coverage.

Based on this analysis, the Air Force internship program's coverage of the contracting administration competency does not sufficiently cover the DoD's contract administration technical competency unit. It could be assumed that contract administration is an area that concerns Air Force internship officials. It is a positive trend that a quarter of the Army's technical competency requirements are in contract administration. However, this percentage again raises concern because it is disproportionate to such a significant aspect of the contract management process. The Navy's must also increase its contract administration technical competency coverage to be commensurate with the skill level required to administer contracts adeptly. The analysis also indicates that the Army focuses less coverage of technical competency areas such as addressing small business concerns, procurement policy, negotiating forward pricing rates agreements or learning about contract terminations.

Based on the research findings, the Navy is doing the most complete job of covering the DoD contracting technical competencies. The Army's coverage is

respectable but not as thorough as the Navy's, while the Air Force's coverage lags far behind the other organizations in the pre-award/award and contract administration technical competency units. It appears that the Navy focuses most of its competency tasks on the pre-award and award phases as most of the additional points the organization received were concentrated in the Pre-Award and Award technical competence unit. The other three areas the Navy excelled in were (1) Source Selection Planning (2) Solicitation of Offers and (3) Contract Performance Management.

The analysis indicates that the defense internship programs do not focus much attention on the technical competency areas of (1) Procurement Policy (2) Activity Program Coordinator for Purchase Card or (3) Contingency Contracting. The defense organization's rationale for this may be that activities related to procurement policy are normally performed by Procurement Analysts. Procurement Analysts are experienced contracting officers that research, analyze, interpret and develop contracting policy for contracting personnel regarding the applicability of procurement regulations and other guidance. Additionally, defense contracting offices are charged with designating an Agency Program Coordinator (APC) who is dedicated solely to the management of the purchase card program. The majority of the DoD contracting workforce will not be involved in the government purchase card program. Last, contingency contracting is normally performed in the combat environment during contingency operations by the military contracting workforce. This may explain why defense organization internship programs do not make attaining technical competence in those areas a priority.

The content analysis, shown in Appendix L, of the industry internship best practices in comparison to the defense internship practices, shows that not all of the industry best practices are fully incorporated among the defense organizations. The defense organizations are doing a good job at incorporating industry best practices for the most part as 12 of the 18 best practices are currently and evenly integrated into the defense internship programs. Four of the remaining six best practices (1) Orientation (2) Mentoring (3) Rotational Opportunities and (4) Relocation Assistance are similarly matched as well. However, the last two best practices (5) Intern Communication

Methods; and (6) Showcasing Intern Work are where the Navy takes a lead in the assessment ratings while the Army and the Air Force, respectively, lag behind.

The Navy's higher rated coverage of contracting technical competencies and incorporation of industry best practices does not exempt the organization from having internship program areas that need improvement. All of the defense organizations ultimately have the same objective, to produce experienced, skilled contracting personnel. Interns, like many government employees, frequently move within the sponsor organization, the DoD and to other government agencies to seek advancement opportunities. Therefore, it behooves defense organizations to cover the same competencies and managed their internships for contracting professionals synchronically. The two comparative analyses illustrate the need for the Navy to strengthen the weak areas, in relation to technical competency requirements and industry best practice incorporation. Subsequently, the Army and Air Force should review the Navy's revised program to improve their internship programs. The defense organizations should then begin the process of aligning and standardizing all three internship programs.

The next chapter will summarize the research, present the author's conclusions, and recommend areas for further research.

V. SUMMARY, CONCLUSION, AND AREAS FOR FURTHER RESEARCH

A. SUMMARY

The purpose of this final chapter is to summarize the presented research findings, provide conclusions, and present the author's recommendations for areas of further research.

Defense contracting internships are a critical component to developing and maintaining a professional defense acquisition workforce that is trained and fully qualified to meet the procurement needs of those serving the nation. The number of seasoned federal acquisition professionals is projected to decrease significantly in the near term because of attrition due to retirements, mandatory workforce reductions, and other employment opportunities. DoD contracting internships curtail the loss of personnel by developing skilled professionals to meet projected acquisition workforce requirements. The research conducted in this thesis was needed to determine if defense contracting internship programs are consistent in defining, monitoring, and validating DoD technical contracting competencies and to what extent industry internship best practices are currently incorporated into the programs.

The introductory chapter discussed the purpose of the research, provided background information and introduced the primary and subsidiary research questions. The literature review in Chapter II distinguished internships from other experiential learning opportunities by describing an internship as a guided work experience with established learning objectives. An internship is intended to offer the intern occupational skills development while applying knowledge learned in the classroom. The literature review also introduced the eight core principles of quality experiential learning and eighteen industry internship best practices. The core principles provide the foundation for best practices used by industry to establish and maintain successful internship programs.

Chapter III detailed the DoD contracting technical competencies and described the process in which they were developed. Additionally, Chapter III presented a

comprehensive overview of the Air Force, Army, and Navy's contracting internship programs, in correlation with industry internship best practices. The Air Force's COPPER CAP internship program is used to train entry-level Air Force employees as contract specialists. Participants begin at the GS-07 grade level with target grades of GS-11 to GS-12 (DAF, 2013). The Department of the Army established an internship program for its new entrants into the contracting and acquisition career field (CP-14) called the Contracting and Acquisition Management Development Program. It is a 24-month long, structured training program that provides entry-level DA employees an opportunity for accelerated promotions and career broadening assignments (DA, 2013b). The Navy/Marine Corps' Naval Acquisition Intern Program is a development program for new entrants into the contracting and acquisition sector of the federal workforce. The NAIP is a three-year training program that offers highly qualified college graduates an opportunity for advancement, regular promotions, systematic development, and graduate education (Assistant Secretary of the Navy, 2013). The internship programs all include structured OJT, formal classroom training and rotational opportunities. Graduates of the defense internship programs are eligible for permanent, civil service employment positions.

Chapter IV presented a measured assessment of each defense internship programs' coverage of contracting technical competencies and the degree of industry best practice implementation. The technical competencies identified on the DoD Contracting Competency Model (Appendix B) were used as an assessment baseline to measure how consistently contracting competencies are covered by each defense internship program. The results of the DoD contracting competencies comparative analysis are presented in Appendix H.

Chapter IV also reviewed the industry internship best practices and introduced their derivative best practice assessment categories. The research methodology, its limitations, and the rating assessment scale were presented respectively. Content analysis was the basis for the best practice analysis methodology. The assessment rating scale ranged from zero to four and provided quantitative granularity to the content analysis.

B. CONCLUSION

The research findings concluded that there is inconsistent coverage of the DoD technical competencies among the defense organizations. The Air Force, Army and Navy contracting internship programs concentrate most of the training and tasks associated with the intern's development on acquiring the highest level of technical competence in the pre-award and award acquisition phases. The technical competence units within the subset of Contract Pre-Award/Award accounted for 71.9% of the Air Force's Technical Elements, 71.8%, of the Department of the Army's Technical Elements, and 75.7% of the Navy's Technical Elements. It is estimated that one-third of the tasks involved in contract management are categorized under contract administration. Proportionately, the defense organizations are not including a sufficient amount of tasks and training on the interns' development plans to achieve the high-level of proficiency needed to perform in this technical competence area. The analysis reported that contract administration encompasses only 12.5% of the COPPER CAPs required technical competencies, only 25.6% for CP-14 interns, and 18.8% for NAIP interns. The units of technical competence that encompass the Miscellaneous Technical Competencies subset accounted for only 2.6% of the CP-14 interns' technical competency requirements, 5.6% for NAIP interns, and 15.6% for COPPER CAPs. Collectively, the defense internships programs consistently neglected technical competency areas such as contract terminations, socio-economic programs, negotiating forward pricing rates agreements, and cost accounting standards administration. The analysis further revealed that neither of the three defense contracting internship programs' development plans required tasks or training to attain proficiency in the Procurement Policy or Contingency Contracting technical competence units.

The analysis of industry best practice implementation concluded that all of the DoD internship programs fully implement 12 of the 18 industry best practices currently. The best practice of conducting orientation for the interns has also been fully implemented by all three defense internship programs. The Navy has implemented the best practices of establishing an effective means of communication with interns and showcasing their work. In contrast, the research reveals no evidence that the Air Force and Army's contracting internship programs have implemented either of these best

practices. The analysis shows that there is not a great disparity in best practice implementation between the defense internship programs as there is only a ten point difference between the lowest and highest scores of 56 (Air Force) and 66 (Navy).

The results of the research provided the following answers to the primary and subsidiary research questions:

1. Primary Research Questions

a. How consistent are the Army, Navy and Air Force contracting internship programs in their coverage of DoD contracting competencies?

The research finds that the Army, Navy and Air Force contracting internship programs are not consistent in their coverage of DoD contracting competencies. The average range of defense internship programs' coverage of the 10 technical competency units is 5.2%. The Procurement Policy and Contingency Contracting technical competency units had the narrowest range of coverage, both at zero percent. The highest level of consistency among the competency subsets was in the Contract Pre-Award/Award subset of technical competency units, which consists of (1) Pre-award and Award (2) Develop and/or Negotiate Positions and (3) Advance Cost and/or Price Analysis. A range of only 3.9% exists between the Navy's 75.7% coverage of the technical competency units and the Army's 71.8%, coverage by prescription of each programs' requisite technical elements. The average rate of coverage among the three programs was 73.1%. The other two subsets were Contract Administration, comprised of only the Contract Administration unit of technical competence, and the Miscellaneous Technical Competencies subset, which consists of the technical competency units (1) Small Business/Socio-Economic Programs (2) Negotiate FPRAs & Administer Cost Accounting Standards (3) Contract Termination (4) Procurement Policy (5) Other Competencies and (6) Contracting in a Contingent Environment. The range for Contract Administration subset is 13.1%. A wide range of competency coverage exists because of the Air Force's 12.5% coverage of Contract Administration is half that of the Army's 25.6%. The low coverage of 2.6% by the Navy and the Air Force's higher than

average coverage of 15.6% accounts for the broad coverage range in the Miscellaneous Technical Competencies subset of 13%.

b. To what extent have the Army, Navy and Air Force contracting internship programs incorporated industry internship best practices?

The measured assessment of each defense internship programs' incorporation of industry internship best practices shows that each program has best practices that are not fully implemented. The content analysis reveals that the defense internship programs successfully incorporated 12 of the 18 industry best practices to the highest extent. The best practice categories could each be assessed a maximum of four points. Therefore, each defense internship program could earn a total of 72 points. The Air Force was assessed 56 points, which results in a 78% implementation rate. The Army was assessed 61 points and the Navy 66, resulting in implementation rates of 85% and 92%, respectively. The average rate of industry best practice incorporation is 85%, illustrating the assertion that the defense internship programs' have areas that need improvement.

2. Subsidiary Research Question

a. What aspects of the defense organizations' contracting internship programs can be improved to ensure the programs are consistent and that industry best practices are incorporated?

The aspects of the defense organizations' contracting internship programs that can be improved to ensure the programs cover technical competencies consistently are (1) to ensure that the Air Force, Army and Navy contracting internship programs consistently cover the DoD technical competencies and (2) align and standardize all three defense internship programs.

The ultimate goal is to improve the technical proficiency of the DoD acquisition workforce. Currently, each defense contracting internship program covers the DoD technical competencies at a different level. A competency coverage baseline must first be established to ensure consistent coverage of DoD contracting technical competencies across all three defense internship programs. The competency coverage baseline could then be used to determine the proficiency of the defense internship

program graduates. The proficiency determination can assist with finding ways to improve the technical proficiency of the DoD acquisition workforce.

Additionally, leadership from each defense contracting internship programs should meet to discuss a plan to align and standardize all three defense internship programs. The alignment and standardization plan will entail performing the first improvement aspect and then ensuring that all internship development plans contain identical technical competency requirements.

The aspects of the defense organizations' contracting internship programs that can be improved to ensure that industry best practices are fully incorporated are (1) determine which best practices need to be implemented fully (2) require leadership from defense contracting internships to write policy guidance on the best practice implementation and (3) ensure officials from each defense internship program comply with the new implementation guidance.

C. AREAS FOR FURTHER RESEARCH

The scope of this research was limited to the assessment of referenced materials and did not include interviews with defense internship program officials. As such, the first recommended area for further research is to conduct interviews with leadership from each of the defense contracting internship programs to gain further insight into the processes and management of each program. Interviews should also be conducted with graduates and current interns of the defense contracting internships programs to assess whether they attained or are attaining the technical competencies needed to perform successfully in their target positions.

A second recommendation is for defense internship officials to devise and implement a plan to align and standardize all three defense internship programs and ensure consistent coverage of the DoD contracting technical competencies.

A final recommendation is for defense internship officials to create a joint DoD contracting internship program office, managed at the DoD level, which would oversee all of the defense internship programs jointly. This measure will provide some assurance that the newly standardized programs will remain aligned and managed concurrently.

APPENDIX A. FEDERAL EMPLOYEE BENEFITS

a. Flexible and alternative work schedules
b. 10 paid federal holidays
c. 13 vacation days per year (18 days after four years and 24 days after 15 years)
d. 13 days of annual sick leave
e. Low-cost term life insurance
f. Choice of several subsidized health plans
g. A 3-tiered Federal retirement plan that includes Social Security, an annuity, and a tax-deferment of up to $17,500 of the intern's salary when participating in the Thrift Savings Plan (TSP). The defense organization will match of up to five percent of the TSP participant's first five percent contribution;
h. Performance-based bonuses and time off awards
i. Flexible Spending Account (FSA) for tax-deferred spending on medical expenses and childcare costs
j. Rapid advancement and salary increases throughout the internship's duration assuming satisfactory performance and demonstrated potential to perform at a higher level
k. Tuition assistance opportunities towards a job-related graduate degree or certificate program
l. Paid expenses for job-related relocations, including the first duty move
m. The Department of Defense offers a Mass Transit Program, which subsidizes employee use of public transportation.
n. Repayment of student loans on qualifying loans and sign-on bonuses for hard-to-fill locations.

Table 1. Federal Employee Benefits
(After Moureax & Naylor, 2003; Assistant Secretary of the Navy, 2013)

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APPENDIX B. DOD CONTRACTING COMPETENCY MODEL

10 Units of Technical Competence	28 Technical Competencies	52 Technical Elements
Pre-Award and Award	Determination of How Best to Satisfy Requirements for the Mission Area	1. Provide proactive business advice on requirements documentation based on analysis of requirements and performance-based approaches to find the best solution to satisfy mission requirements.
		2. Conduct market research using relevant resources prior to solicitation to understand the industry environment and determine availability of sources of supply and/or services.
		3. Perform acquisition planning by considering all available sources and methods of procurement to satisfy mission needs while appropriately allocating risk.
	Consider Socio-economic Requirements	4. Consider socio-economic requirements including small business, labor, environmental, foreign, and other socio-economic requirements to provide maximum practicable contracting and subcontracting opportunities.
	Promote Competition	5. Conduct pre-solicitation industry conferences and analyze responses to draft solicitation terms and conditions to promote full and open competition.
		6. Identify and facilitate joint ventures and partnering on solicitations and subcontracting opportunities to increase competition and/or small business participation.
	Source Selection Planning	7. Document a source selection plan that is consistent with public law, regulations, policy, and other guidelines.
	Solicitation of Offers	8. Conduct pre-bid or pre-proposal conference to inform offerors of the requirements of the acquisition.
		9. Publicize proposed procurements to promote competition.
		10. Issue a written solicitation consistent with the requirements documents, acquisition plan and source selection plan, that includes the appropriate provisions and clauses tailored to the requirement.
		11. Issue amendments or cancel solicitations when such actions are in the best interest of the government and conform to law and regulations.
		12. Respond to pre-award inquiries by taking the appropriate action according to FAR/DFARS (and applicable supplements) to resolve questions.
	Responsibility Determination	13. Determine contractor responsibility by assessing past performance and financial stability to ensure that the contractor will be able to satisfy government requirements.
	Bid Evaluation (Sealed Bidding)	14. Evaluate the sealed bids in a transparent manner to preserve the integrity of the competitive process.

Table 2. DoD Contracting Competency Model
(From Federal Acquisition Institute [FAI], 2013)

APPENDIX B. DOD CONTRACTING COMPETENCY MODEL (cont.)

10 Units of Technical Competence	28 Technical Competencies	52 Technical Elements
Pre-Award and Award	Bid Evaluation (Sealed Bidding)	15. Perform price analysis to determine whether the lowest evaluated bid is reasonable and provides the best value to the government.
	Proposal Evaluation (Contracting by Negotiation)	16. Evaluate proposals and quotes against evaluation criteria and request technical and pricing support, if needed, to identify offers that are acceptable or can be made acceptable.
	Source Selection	17. Decide whether to hold discussions based on results of the evaluation.
		18. Establish the competitive range to determine which of the offers will not be considered for the award.
	Contract Award	19. Select the awardee who in the Government's estimation, provides the best value.
		20. Award contract/ Issue task or delivery orders after ensuring fund availability and obtaining reviews and approvals.
		21. Conducting pre/post award debriefings for all unsuccessful offerors when requested to ensure appropriate disclosure of information.
	Process Protests	22. Process protests to determine whether to withhold award or stop performance pending outcome of the protest.
Develop and/or Negotiate Positions	Justification of Other than Full and Open	23. Justify the need to negotiate or award the contract without full and open competition or, in a multiple award scenario, without providing for fair opportunity based on business strategies and market research.
	Terms and Conditions	24. Determine terms and conditions, including special contract requirements applicable to the acquisition that are appropriate for the acquisition to comply with laws and regulations (e.g., method of financing, government property, intellectual property, OCI, specialty metals).
	Preparation and Negotiation	25. Prepare for negotiations / discussions / awards by reviewing audit and technical reports, performing cost and/or price analysis (or reviewing price analysts' reports), and developing pre-negotiation position to include identifying potential trade-offs.
		26. Negotiate terms and conditions (including price) based on the pre-negotiation objective and give-and-take with the offeror to establish a fair and reasonable price.
Advanced Cost and/or Price Analysis	Advanced Cost and/or Price Analysis	27. Evaluate the reasonableness of the contractor's proposed cost/price for use in preparing for complex negotiations.

Table 2. DoD Contracting Competency Model (From FAI, 2013) (cont.)

APPENDIX B. DOD CONTRACTING COMPETENCY MODEL (cont.)

10 Units of Technical Competence	28 Technical Competencies	52 Technical Elements
Advanced Cost and/or Price Analysis	Advanced Cost and/or Price Analysis	28. Develop positions on pricing-related-contract terms and conditions to aid in developing the government's position.
		29. Supports special cost, price, and finance efforts by researching, analyzing and providing recommended positions that are in the best interests of the government.
		30. Evaluate award fee/incentive fee plans and arrangements for adherence to policy and guidance.
Contract Administration	Initiation of Work	31. Conduct post-award orientations to address customer concerns and contractor's responsibilities for performance of the contract.
		32. Plan for contract administration regarding delegating administrative functions; designating, training and managing CORs; and formally establishing all contract administration responsibilities.
	Contract Performance Management	33. Administer contract by monitoring contracting officer representative's feedback, contractor performance, and enforcing contractor compliance with contract requirements.
		34. Ensure past performance evaluation is initiated to ensure documentation of performance including contracting officer input.
		35. Analyze, negotiate, and prepare claims file in order to issue final decisions.
		36. Resolve contract performance problems by gathering facts, determining remedies, and initiate remedial actions in order to find and provide a solution.
	Issue Changes and Modifications	37. Analyze the need for contract modifications and negotiate and issue contract modifications, as required.
	Approve Payment Requests	38. Approve contractor request for payments to include final vouchers under cost reimbursement contracts, progress payments, performance-based payments, or commercial financing.
	Close-out Contracts	39. Close-out contracts following proper procedure to ensure property disposition, final payments, and documents/clearances have been received.
Small Business/Socio-Economic Programs	Addressing Small Business Concerns	40. Assist small business concerns in understanding how to do business with the government, identifying contracting opportunities, and responding to small business inquiries regarding payment delays or problems.

Table 2. DoD Contracting Competency Model (From FAI, 2013) (cont.)

APPENDIX B. DOD CONTRACTING COMPETENCY MODEL (cont.)

10 Units of Technical Competence	28 Technical Competencies	52 Technical Elements
Small Business/Socio-Economic Programs	Addressing Small Business Concerns	41. Serve as a small business specialist and assist the Small Business Administration's assigned representative in conducting annual reviews of small business share, evaluation of contractors' subcontracting performance, and planning to maximize the use of small businesses.
		42. As a small business specialist provide recommendations on acquisition documents as to whether a particular acquisition should be set aside for one of the Small Business programs.
Negotiate FPRAs & Administer Cost Accounting Standards	Negotiate Forward Pricing Rates Agreements & Administer Cost Accounting Standards	43. Negotiate forward pricing rate agreements (FPRAs) for billing purposes and administer cost accounting standards to ensure contractor's compliance.
Contract Termination	Contract Termination	44. Terminate contracts using applicable FAR (and supplemental) requirements if it is in the best interest in the government (either termination for convenience or cause/default).
Procurement Policy	Procurement Analysis	45. Provide analysis to advise on procurement matters including contract documentation, legislation issues, and congressional inquiries impacting contracting matters.
		46. Develops procurement policy and changes in procedures through analysis of major procurements for statutory and regulatory compliance and a macro-analysis of contracting matters.
		47. Advise on high-level legislation & policy matters to recommend &/or lead change in the procurement process.
		48. Perform oversight & audits to review contract files, compile lessons learned, & ensure consistent policy application.
Other Competencies	E-Business and Automated Tools	49. Use e-business systems and automated tools to promote standardization, efficiency, and transparency.
	Activity Program Coordinator for Purchase Card	50. Performs oversight and execution for the Purchase Card Program.
	Construction/Architect & Engineering (A&E)	51. Develops acquisition strategies, issues notices/solicitations, conducts negotiations, selects sources, awards/ administers contracts for construction & A&E in accordance w/requirements & procedures associated w/construction & A&E outlined in the FAR & supplemental policy & procedures (w/particular attention to FAR Part 36).

Table 2. DoD Contracting Competency Model (FAI, 2013) (cont.)

APPENDIX B. DOD CONTRACTING COMPETENCY MODEL (cont.)

10 Units of Technical Competence	28 Technical Competencies	52 Technical Elements
Contracting in a Contingent and/or Combat Environment	Contracting in a Contingent and/or Combat Environment	52. Apply contracting expertise during deployments, contingency operations, or responses to natural disasters

Table 2. DoD Contracting Competency Model (From FAI, 2013) (cont.)

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APPENDIX C. DAU CONTRACTING LEVEL I CERTIFICATION REQUIREMENTS

Core Certification Standards (required for DAWIA certification)	
Acquisition Training	None required
Functional Training	● **CON 090** Federal Acquisition Regulation (FAR) Fundamentals **(R)** ● **CON 100** Shaping Smart Business Arrangements ● **CON 121** Contract Planning ● **CON 124** Contract Execution ● **CON 127** Contract Management ● **CON 170** Fundamentals of Cost and Price Analysis **(R)** ● **CLC 033** Contract Format and Structure for DoD e-Business Environment ● **CLC 058** Introduction to Contract Pricing ● Effective 1 October 2013 the following courses are added as Functional Training Standards: ● **CLC 025** Small Business Program for Contracting Officers ● **CLC 057** Performance Based Payments and Value of Cash Flow
Education	● At least 24 semester hours in accounting, law, business, finance, contracts, purchasing, economics, industrial management, marketing, quantitative methods, or organization and management ● Baccalaureate degree (Any Field of Study)
Experience	1 year of contracting experience.

Table 3. DAU Contracting Level I Certification Requirements (From Defense Acquisition University [DAU], 2013)

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APPENDIX D. DAU CONTRACTING LEVEL II CERTIFICATION REQUIREMENTS

Core Certification Standards (required for DAWIA certification)	
Acquisition Training	**ACQ 101** Fundamentals of Systems Acquisition Management
Functional Training	● **CON 200** Business Decisions for Contracting ● **CON 216** Legal Considerations in Contracting ● **CON 270** Intermediate Cost and Price Analysis **(R)** ● **CON 280** Source Selection and Administration of Service Contracts **(R)** ● **CON 290** Contract Administration and Negotiation Techniques in a Supply Environment **(R)** ● **CLC 051** Managing Government Property in the Possession of Contractors ● **CLC 056** Analyzing Contract Costs ● **CLC 057** Performance Based Payments and Value of Cash Flow ● **HBS 428** Negotiating ● Effective 1 October 2013 CLC 057 will become a Level I vice a Level II Functional Training Standard
Education	● At least 24 semester hours in accounting, law, business, finance, contracts, purchasing, economics, industrial management, marketing, quantitative methods, or organization and management ● Baccalaureate degree (Any Field of Study)
Experience	2 years of contracting experience.

Table 4. DAU Contracting Level II Certification Requirements (From DAU, 2013)

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APPENDIX E. AIR FORCE TECHNICAL COMPETENCY REQUIREMENTS

Six Units of Technical Competence	23 Technical Competencies		32 Technical Elements
Pre-Award and Award	Simplified Acquisition Procedures	AFTE-1	Knowledge of simplified acquisition regulations and procedures.
		AFTE-2	Ability to process simplified acquisition awards.
		AFTE-3	Knowledge of pricing procedures and the ability to apply them.
	Market Research	AFTE-4	Knowledge of the policies and procedures for conducting and documenting market research to arrive at the most suitable approach to acquiring, distributing, and supporting supplies and services.
	Acquisition Planning	AFTE-5	Knowledge of Milestones.
		AFTE-6	Streamlined Acquisition Strategy Summary.
		AFTE-7	Acquisition Plans and ability to conduct an acquisition strategy panel.
	Source Selection	AFTE-8	Knowledge of complex acquisition techniques and the ability to apply them.
	Publicizing Contract Acts	AFTE-9	Knowledge of the policies and procedures for publicizing contract opportunities and award information.
	Competition Requirements	AFTE-10	Knowledge of the policies and procedures to promote full and open competition in the acquisition process and to provide for full and open competition, full and open competition after exclusion of sources, other than full and open competition, competition advocates and Justification and Approvals.
	Required Sources of Supplies and Services	AFTE-11	Knowledge of the policies and procedures for the acquisition of supplies and services from or through Government supply sources and those sources (DLA, FSS, Ability One, Federal Prison Industries).
	Sealed Bids	AFTE-12	Knowledge of sealed bid procedures and the ability to process awards using IFBs.

Table 5. Air Force Technical Competency Requirements (After DAF, 2011)

APPENDIX E. AIR FORCE TECHNICAL COMPETENCY REQUIREMENTS (CONT.)

Six Units of Technical Competence	23 Technical Competencies		32 Technical Elements
Pre-Award and Award	Negotiated Acquisitions	AFTE-13	Knowledge of negotiated procedures and the ability to process competitive and restricted source awards using RFPs.
	Contractor Responsibility	AFTE-14	Knowledge of determinations, past performance information, pre-award surveys.
	Review and Approval of Contracts	AFTE-15	Knowledge of policies and procedures for obtaining legal review and business/contract clearance.
		AFTE-16	Ability to process for legal and business/contract clearance.
	Contract Types	AFTE-17	Knowledge of various types of contracts and the ability to determine when each is appropriate.
	Service Contracting	AFTE-18	Knowledge of the policy and procedures that are specific to the acquisition and management of services by contract and the use of Performance Based acquisitions.
	Contract Formats/ Techniques	AFTE-19	Knowledge of indefinite quantity, requirements, basic ordering agreements, blanket purchase agreements, options, and multi-year policies and procedures.
		AFTE-20	Ability to review requirements, determine appropriate course of action, and proceed to award.
	Assist with Review of Contract Documents	AFTE-21	Knowledge of method of review and approval procedures.
	Protests, Disputes, Claims	AFTE-22	Knowledge of FAR requirements and procedures; and the ability to apply them.
Develop and/or Negotiate Positions	Pricing Techniques	AFTE-23	Knowledge of procedures and techniques for price/cost analysis and the ability to process them.
		AFTE-24	Knowledge of negotiation strategies and skill in carrying them out.

Table 5. Air Force Technical Competency Requirements (After DAF, 2011) (cont.)

APPENDIX E. AIR FORCE TECHNICAL COMPETENCY REQUIREMENTS (CONT.)

Six Units of Technical Competence	23 Technical Competencies		32 Technical Elements
Advanced Cost and/or Price Analysis	Pricing Negotiations	AFTE-25	Knowledge of pricing techniques to include price and cost analysis, the basic elements for constructing the pricing of a contract, Defense Contract Audit Agency functions and reports, and evaluation of profit/fee.
Contract Administration	Contract Surveillance	AFTE-26	Knowledge of post award phase of contract performance to assist in resolving contractual problems.
		AFTE-27	Learn contract surveillance to include quality assurance, progress reporting procedures, contract close-out procedures, contract termination, and other post award functions.
	Contract Modifications	AFTE-28	Knowledge of forms and procedures utilized and the ability to process the correct type of modification.
Small Business/ Socio-Economic Programs	Small Business	AFTE-29	Knowledge of policies, procedures, and contract provisions/clauses.
		AFTE-30	Ability to select appropriate contract provisions/clauses
Other Competencies	Automated Systems	AFTE-31	Knowledge of SPS, and other computer systems; ability to utilize these systems and their products.
	Construction and Architect – Engineer Contracts	AFTE-32	Knowledge of the policies and procedures peculiar to contracting for construction and architect-engineer services.

Table 5. Air Force Technical Competency Requirements (After DAF, 2011) (cont.)

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APPENDIX F. ARMY TECHNICAL COMPETENCY REQUIREMENTS

Three Units of Technical Competence	14 Technical Competencies		80 Technical Elements
Acquisition Planning	Determination of Need	DATE-1	Customer Business Analysis and Strategy
		DATE-2	Market Research
		DATE-3	Identify Possible Sources
		DATE-4	Funding
		DATE-5	Acquisition Plan
	Analysis of Requirements	DATE-6	Requirements Documents
		DATE-7	Use of Government Property and Supply Sources
		DATE-8	Determine if Services are Commercial in Nature
	Extent of Competition	DATE-9	Competition Requirements
		DATE-10	Limiting Competition
		DATE-11	Socio-Economic Requirements
	Source Selection Planning	DATE-12	Offeror Evaluation Factors
		DATE-13	Method of Acquisition — Contract or Non-Contract
		DATE-14	Price-Related Factors
		DATE-15	Non-Price Factors
		DATE-16	Contract Type: Contractor Risk and Incentives
		DATE-17	Subcontracting Requirements
		DATE-18	Document Source Selection Plan
	Solicitation Terms and Conditions	DATE-19	Unpriced Contracts
		DATE-20	Recurring Requirements
		DATE-21	Contract Financing
		DATE-22	Obtaining Bonds
		DATE-23	Methods of Payment
Contract Formation	Solicitation of Offerors	DATE-24	Publicizing Proposed Acquisitions
		DATE-25	Oral Solicitations
		DATE-26	Solicitation Preparation
		DATE-27	Inquiries and FOIA Requests
		DATE-28	Pre Bid/Quote/Proposal Conferences
		DATE-29	Amending/Canceling Solicitations

Table 6. Army Technical Competency Requirements (After DA, 2013a)

APPENDIX F. ARMY TECHNICAL COMPETENCY REQUIREMENTS (CONT.)

Three Units of Technical Competence	14 Technical Competencies		80 Technical Elements
Contract Formation	Bid Evaluations	DATE-30	Processing Bids
		DATE-31	Bid Acceptance Periods
		DATE-32	Late Offers
		DATE-33	Price Analysis — Sealed Bidding
		DATE-34	Responsiveness
	Preparation and Negotiation	DATE-35	Receiving Quotes and Proposals
		DATE-36	Evaluating Non-Price Factors
		DATE-37	Pricing Info from Offerors
		DATE-38	Accounting and Estimating Systems
		DATE-39	Cost Accounting Standards
		DATE-40	Audits
		DATE-41	Price Analysis -- Negotiated Acquisitions
		DATE-42	Cost Analysis
		DATE-43	Evaluating Other Offered Terms and Conditions
		DATE-44	Award without Discussions
		DATE-45	Communications/Fact Finding
		DATE-46	Establish Competitive Range
		DATE-47	Negotiation Strategy
		DATE-48	Conduction Discussions
		DATE-49	Conducting Negotiations
		DATE-50	Determine Responsibility
		DATE-51	Mistakes in Offers
		DATE-52	Prepare Awards
		DATE-53	Issue Awards and Notices
		DATE-54	Debriefing
		DATE-55	Protests
Contract Administration	Initiation of Work	DATE-56	Post Award Orientation
		DATE-57	Contract Admin Planning
		DATE-58	Task/Delivery Order Contracts

Table 6. Army Technical Competency Requirements (After DA, 2013a) (cont.)

APPENDIX F. ARMY TECHNICAL COMPETENCY REQUIREMENTS (CONT.)

Three Units of Technical Competence	14 Technical Competencies		80 Technical Elements
Contract Administration	Modifications	DATE-59	Contract Modification and Adjustment
		DATE-60	Options
	Quality Assurance	DATE-61	Monitor Subcontract Management
		DATE-62	Performance Management
		DATE-63	Commercial Item/Simplified Acquisition Remedies
		DATE-64	Noncommercial Acquisition Remedies
		DATE-65	Document Past Performance
	Payment and Accounting	DATE-66	Invoices
		DATE-67	Assignment of Claims
		DATE-68	Administering Bonds or Other Securities
		DATE-69	Administering Finance Terms
		DATE-70	Allowability of Costs
		DATE-71	Price and Fee Adjustments
		DATE-72	Defective Pricing
		DATE-73	Fraud and Exclusion
		DATE-74	Collecting Contractor Debts
	Special Terms	DATE-75	Property Administration
		DATE-76	Intellectual Property
	Contract Closeout or Termination	DATE-77	Claims
		DATE-78	Resolving Disputes
		DATE-79	Termination
		DATE-80	Closeout

Table 6. Army Technical Competency Requirements (After DA, 2013a) (cont.)

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APPENDIX G. NAVY TECHNICAL COMPETENCY REQUIREMENTS

Seven Units of Technical Competence		71 Technical Elements	Associated Tasks
Contract Planning & Coordination Phase	NTE-1	Delegation of authority to Contracting officer	
	NTE-2	Roles/responsibilities of Acquisition team members (including DCAA, DCMC, etc.)	
	NTE-3	Use/limitations of types of Contracts:	(a) Fixed Price Contracts (FAR 16.2)
			(b) Cost Reimbursement contracts (FAR 16.3)
			(c) Incentive contracts (FAR 16.4)
			(d) Indefinite Delivery contracts (FAR 16.5)
			(e) Time & Materials/Labor Hour Contracts (FAR 16.6)
			(f) Basic Agreements/Basic Ordering (FAR 16.7)
			(g) Grants & Assistance
			(h) Letter Contracts
			(i) Multi-year Contracting
			(j) Multiple Award Contract
	NTE-4	Ordering mechanisms:	(a) Purchase orders
			(b) Delivery order/task order 4.B.1 Fair Opportunity 4.B.2 Orders under Multiple Award Contracts (Section 803)
			(c) BOA order
			(d) Provisioned item order
			(e) Schedule Buying
	NTE-5	Contracting Methods	(a) Sealed bidding
			(b) Competitive negotiation
			(c) Non-competitive negotiation
			(d) Simplified Acquisition Procedures
			(e) Brooks Act
			(f) Purchase Cards

Table 7. Navy Technical Competency Requirements (After DoN, 2013)

APPENDIX G. NAVY TECHNICAL COMPETENCY REQUIREMENTS (CONT.)

Seven Units of Technical Competence		71 Technical Elements	Associated Tasks
Contract Planning & Coordination Phase	NTE-6	Analysis of Requirements	
	NTE-7	Market research in acquisition planning phase	
	NTE-8	Contracting Categories	(a) Major Systems
			(b) Research and development
			(c) Services requirements
			(d) Architect/Engineer
			(e) Construction
			(f) Ship leasing
			(g) Multi-year contracting
			(h) Second source/dual source/leader-follower
			(i) Commercial Items
			(j) Information Technology
			(k) Indemnification/insurance
			(l) Technical instructions
			(m) Period of performance
	NTE-9	Understanding of contracting with/for Foreign sources:	(a) Foreign Military Sales
			(b) Foreign Contracting: understand implications of:
			(i) Domestic award to foreign source
			(ii) Overseas award to foreign source
			(c) Impact of Trade Agreements Act, Buy American Act, etc.
	NTE-10	Planning, Programming & Budgeting System	(a) Source/authority/responsibility for funding
			(b) Full funding vs. incremental funding
			(c) Appropriate use of funding types
			(d) Anti-deficiency Act.
	NTE-11	Familiarity with DoD 5000.1 et al	

Table 7. Navy Technical Competency Requirements (After DoN, 2013) (cont.)

APPENDIX G. NAVY TECHNICAL COMPETENCY REQUIREMENTS (CONT.)

Seven Units of Technical Competence		71 Technical Elements	Associated Tasks
Contract Planning & Coordination Phase	NTE-12	Acquisition Planning and Documentation	(a) Develop Acquisition Plan/Acquisition Strategy
			(b) Develop source selection plan
			(c) Develop technical evaluation plan
			(d) Prepare Justification & Approval
			(e) Prepare Determination & Finding
			(f) Understand requirements documents
			(g) Prepare material and delivery requirements
			(h) Prepare Work Statement and specifications
			(i) Period of performance.
	NTE-13	Intellectual Property	(a) Understand Patents & Copyrights
			(b) Understand Rights In Technical Data
			(c) Understand Rights In Computer Software
Pre-Solicitation Phase	NTE-14	Qualified Bidders List	
	NTE-15	Qualified Products List	
	NTE-16	Small Business/Small Disadvantaged Business programs and procedures	
	NTE-17	Market Research in Solicitation Phase	
	NTE-18	Understand requirements for submission of cost or pricing data	
	NTE-19	Understand Equal Employment Opportunity provisions	
	NTE-20	Source selection plan and evaluation criteria	
	NTE-21	Prepare/issue FedBizOps synopsis	
	NTE-22	Approval for Non-Standard provisions	

Table 7. Navy Technical Competency Requirements (After DoN, 2013) (cont.)

APPENDIX G. NAVY TECHNICAL COMPETENCY REQUIREMENTS (CONT.)

Seven Units of Technical Competence		71 Technical Elements	Associated Tasks
Pre-Solicitation Phase	NTE-23	Arrange/participate in source selection meetings (e.g., SSAC, SSEB, review board, etc.)	
	NTE-24	Department of Labor determination and approvals	
	NTE-25	Select appropriate solicitation strategy	(a) Sealed bidding
			(b) Negotiated: low price
			(c) Negotiated: best value
			(d) Negotiated: non-competitive
			(e) Simplified Acquisition
	NTE-26	Draft solicitation/obtain necessary approvals. Draft solicitation for industry comment	
	NTE-27	Enforcing Organizational Conflicts of Interest/Procurement Integrity requirements	
Solicitation Phase	NTE-28	Draft solicitation documents and obtain necessary approval	
	NTE-29	Issue solicitation	
	NTE-30	SeaPort Solicitation	
	NTE-31	Pre-Bid/Pre-Proposal conference	
	NTE-32	Exchanges with Offerors Before Receipt of Proposals	
	NTE-33	Solicitation Amendments	
	NTE-34	Safeguarding Bids/Proposals and Information	
	NTE-35	Receipt/Evaluation of Unsolicited Proposals	

Table 7. Navy Technical Competency Requirements (After DoN, 2013) (cont.)

APPENDIX G. NAVY TECHNICAL COMPETENCY REQUIREMENTS (CONT.)

Seven Units of Technical Competence		71 Technical Elements	Associated Tasks
Evaluation/Award: Sealed Bid	NTE-36	Bid Opening	
	NTE-37	Mistake-in-bid, late bids	
	NTE-38	Responsibility Determination	
	NTE-39	Draft contract and obtain necessary approvals	
	NTE-40	Confirm/Obtain appropriate funding	
	NTE-41	Obtain performance/payment bonds	
	NTE-42	Obtain required pre-award approvals (e.g., EEO)	
	NTE-43	Protests	
Evaluation/Award: Negotiated Procurements	NTE-44	Source selection Evaluation (SSAC, SSEB, review board, etc.).	
	NTE-45	Pricing/Administration/Payment support (e.g., DCAA, DCMA, DFAS)	
	NTE-46	Forward pricing rate agreements	
	NTE-47	Contractor past performance evaluation	
	NTE-48	Price Analysis	
	NTE-49	Perform cost analysis of:	(a) Material costs
			(b) Subcontracts
			(c) Labor Hours and Labor Rates
			(d) Direct and Indirect rates
			(e) other cost elements
	NTE-50	Perform cost realism analysis	
	NTE-51	Perform profit analysis	
	NTE-52	Competitive range	
	NTE-53	Prepare pre-negotiation clearance and obtain approvals	

Table 7. Navy Technical Competency Requirements (After DoN, 2013) (cont.)

APPENDIX G. NAVY TECHNICAL COMPETENCY REQUIREMENTS (CONT.)

Seven Units of Technical Competence		71 Technical Elements	Associated Tasks
Evaluation/Award: Negotiated Procurements	NTE-54	Conduct a non-competitive negotiation	
	NTE-55	Clarifications, Communications, and Exchanges with Offerors After Receipt of Competitive Proposals	
	NTE-56	Prepare post-negotiation business clearance and obtain approvals	
	NTE-57	Draft contract and obtain necessary approvals	(a) EEO Pre-award Compliance
			(b) Contract Announcement
			(c) Contract Action Reporting to FPDS-NG
	NTE-58	Responsibility determination	
	NTE-59	Debrief unsuccessful offerors	
	NTE-60	Respond to Protests	
Grants/Assistance	NTE-61	Understand difference between contracts and grants	(a) OFPP policy and guidance
			(b) Applicable OMB circulars
			(c) DDRE policy/directives
	NTE-62	Understand roles/responsibilities of scientific officer/program officers and contracting officer/grants officer	
	NTE-63	Understand types of assistance and usage	(a) Grants
			(b) Cooperative agreements
	NTE-64	Understand pre-award assistance actions including Board Agency Announcements Cost principles for educational and not-profit organizations	
	NTE-65	Understand post-award administration differences between grants and contracts	

Table 7. Navy Technical Competency Requirements (After DoN, 2013) (cont.)

APPENDIX G. NAVY TECHNICAL COMPETENCY REQUIREMENTS (CONT.)

Seven Units of Technical Competence		71 Technical Elements	Associated Tasks
Contract Administration	NTE-66	Ability to prepare and issue:	(a) Option exercise
			(b) Unilateral modification
			(c) Bilateral modification
			(d) Change order pursuant to Changes clause
			(e) Waiver or deviation
			(f) Contracting officer correspondence relating to contract
			(g) Definitization modification
	NTE-67	Understand:	(a) contract price redetermination requirements and procedures
			(b) defective pricing requirements and procedures
			(c) negotiation and settlement of termination's for default and convenience
			(d) taxes
			(e) requirements and appropriate actions involving a contractor's labor, strikes and labor agreement matters
			(f) pricing formula for spares/provisioned items
			(g) insurance requirements and types of indemnification
			(h) excusable and other delays
			(i) consequential & other damages
			(j) subcontract clauses & review
			(k) contractor/subcontractor reports & performance
			(l) Disputes avoidance and resolution
			(m) Contract close-out
			(n) Final settlements
			(o) Engineering Change Proposal (ECP) and Value Engineering Change Proposal (VECP)
			(p) Liquidated damages

Table 7. Navy Technical Competency Requirements (After DoN, 2013) (cont.)

APPENDIX G. NAVY TECHNICAL COMPETENCY REQUIREMENTS (CONT.)

Seven Units of Technical Competence		71 Technical Elements	Associated Tasks
Contract Administration	NTE-68	Understand contract financing requirements including:	(a) progress payments
			(b) cost reimbursements
			(c) withholding amounts
			(d) monitoring overhead with DCAA and CAO
			(e) roles and responsibilities in funding and accounting process
			(f) cancellation of closing appropriations
			(g) final payment process
	NTE-69	Understand the "Changes" process, including:	(a) "Changes" provisions of the various contract types
			(b) configuration management
			(c) appropriate contractual vehicles
			(d) avoidance of constructive changes
			(e) handling requests for equitable adjustments
			(f) handling claims
			(g) handling requests for extraordinary contractual relief
	NTE-70	Understand DCAA & CAO interface with PCO/ACO operation	
	NTE-71	Understanding of Government Property, including:	(a) Appropriate use of Government Property
			(b) Disposal of Government Property

Table 7. Navy Technical Competency Requirements (After DoN, 2013) (cont.)

APPENDIX H. TECHNICAL COMPETENCY COMPARISON CHART

10 Units of Technical Competence		28 Technical Competencies	AIR FORCE		ARMY		NAVY	
			Reference	Point Value	Reference	Point Value	Reference	Point Value
Pre-Award and Award	**1**	Determination of How Best to Satisfy Requirements for the Mission Area	AFTE-4, 5, 6, 7	4	DATE-1, 2, 3, 4, 5, 6, 7,8	8	NTE-1, 2,3(a-j), 4(a-e), 5(c-e), 6, 7, 8(a-j). 10(a-d), 11, 13(a-c), 14, 15, 17, 18, 19	45
	2	Consider Socio-economic Requirements	N/A	0	DATE-11	1	NTE-16	1
	3	Promote Competition	AFTE-10	1	DATE-9, 10	2	NTE-21	1
	4	Source Selection Planning	AFTE-8	1	DATE-12, 13, 14, 15, 16, 17, 18	7	NTE-12(a-i), 20, 23, 24	12
	5	Solicitation of Offers	AFTE-8	1	DATE-19 thru 29	11	NTE-21, 22, 25(a-e), 26, 27, 28, 29, 31, 32, 33, 34, 35	16
	6	Responsibility Determination	AFTE-14	1	DATE-50	1	NTE-38, 58	2
	7	Bid Evaluation (Sealed Bidding)	AFTE-12	1	DATE-30, 31, 32, 33, 34	5	NTE-5(a), 36, 37, 39, 40, 41, 42	7
	8	Proposal Evaluation (Contracting by Negotiation)	AFTE-13, 24	1	DATE-35, 36, 37, 38, 39, 51	6	NTE-5(b), 44, 45, 46, 47, 50, 51, 57(a-c)	10
	9	Source Selection	AFTE-23, 25	2	DATE-44, 45, 46, 48	4	NTE-52	1
	10	Contract Award	AFTE-15, 16, 19, 20, 21	5	DATE-52, 53, 54	3	NTE-59	1
	11	Process Protests	AFTE-22	1	DATE-55	1	NTE-43, 60	2

Table 8. Technical Competency Comparison Chart

APPENDIX H. TECHNICAL COMPETENCY COMPARISON CHART (CONT.)

10 Units of Technical Competence		28 Technical Competencies	AIR FORCE		ARMY		NAVY	
			Reference	Point Value	Reference	Point Value	Reference	Point Value
Develop and/or Negotiate Positions	**12**	Justification of Other than Full and Open	AFTE-10	1	N/A	0	N/A	0
	13	Terms and Conditions	N/A	0	DATE-43	1	NTE-71	1
	14	Preparation and Negotiation	AFTE-13, 24	2	DATE-40, 43, 47, 49	4	NTE-53, 54, 55, 56	4
Advanced Cost and/or Price Analysis	**15**	Advanced Cost and/or Price Analysis	AFTE-23, 25	2	DATE-41, 42	2	NTE-48, 49(a-e)	6
Contract Administration	**16**	Initiation of Work	N/A	0	DATE-56, 57, 58	3	NTE-66(f)	1
	17	Contract Performance Management	AFTE-26, 27	2	DATE-61, 62, 63, 64, 65	5	NTE-67(a-p)	14
	18	Issue Changes and Modifications	AFTE-28	1	DATE-59, 60	2	NTE-66(a-e),(g)	6
	19	Approve Payment Requests	N/A	0	DATE-66, 67, 68, 69, 70, 71, 72, 73, 74	9	NTE-68(a-c)(f)(g)	5
	20	Close-out Contracts	AFTE-27	1	DATE-80	1	NTE-67(m)	1
Small Business/Socio-Economic Programs	**21**	Addressing Small Business Concerns	AFTE-29, 30	2	N/A	0	NTE-16	1
Negotiate FPRAs & Administer Cost Accounting Standards	**22**	Negotiate Forward Pricing Rates Agreements & Administer Cost Accounting Standards	N/A	0	DATE-39	1	NTE-46, 68(d), e	3
Contract Termination	**23**	Contract Termination	AFTE-27	1	DATE-79	1	NTE-67c	1
Procurement Policy	**24**	Procurement Analysis	N/A	0	N/A	0	N/A	0

Table 8. Technical Competency Comparison Chart (cont.)

APPENDIX H. TECHNICAL COMPETENCY COMPARISON CHART (CONT.)

10 Units of Technical Competence		28 Technical Competencies	AIR FORCE		ARMY		NAVY	
			Reference	Point Value	Reference	Point Value	Reference	Point Value
Other Competencies	**25**	E-Business and Automated Tools	AFTE-31	1	N/A	0	N/A	0
	26	Activity Program Coordinator for Purchase Card	N/A	0	N/A	0	NTE-5(f)	1
	27	Construction/Architect & Engineering (A&E)	AFTE-32	1	N/A	0	NTE-8(d),e	2
Contracting in a Contingent and/or Combat Environment	**28**	Contracting in a Contingent and/or Combat Environment	N/A	0	N/A	0	N/A	0
		TOTAL		**32**		**78**		**144**

Table 8. Technical Competency Comparison Chart (cont.)

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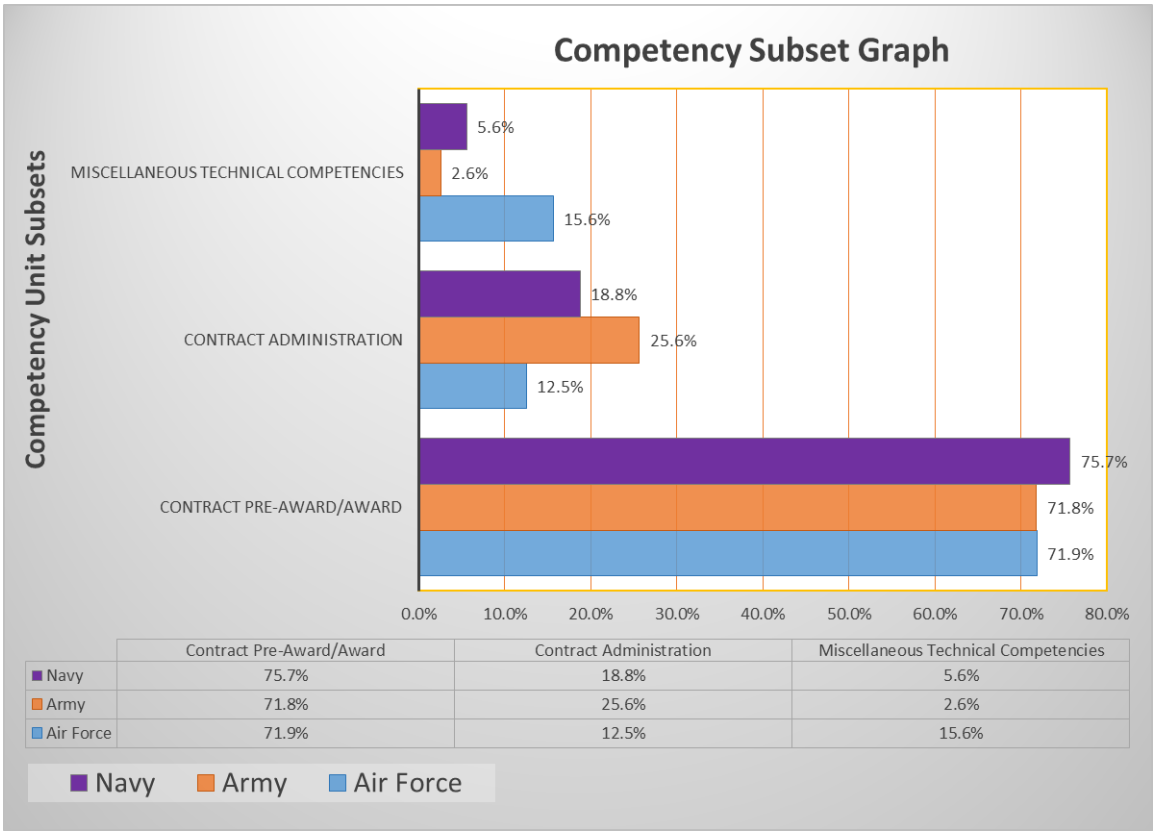
APPENDIX I. TECHNICAL COMPETENCY COMPARISON GRAPHS



	Contract Pre-Award/Award	Contract Administration	Miscellaneous Technical Competencies
Navy	75.7%	18.8%	5.6%
Army	71.8%	25.6%	2.6%
Air Force	71.9%	12.5%	15.6%

Figure 1. Competency Subset Graph

APPENDIX I. TECHNICAL COMPETENCY COMPARISON GRAPHS (CONT.)

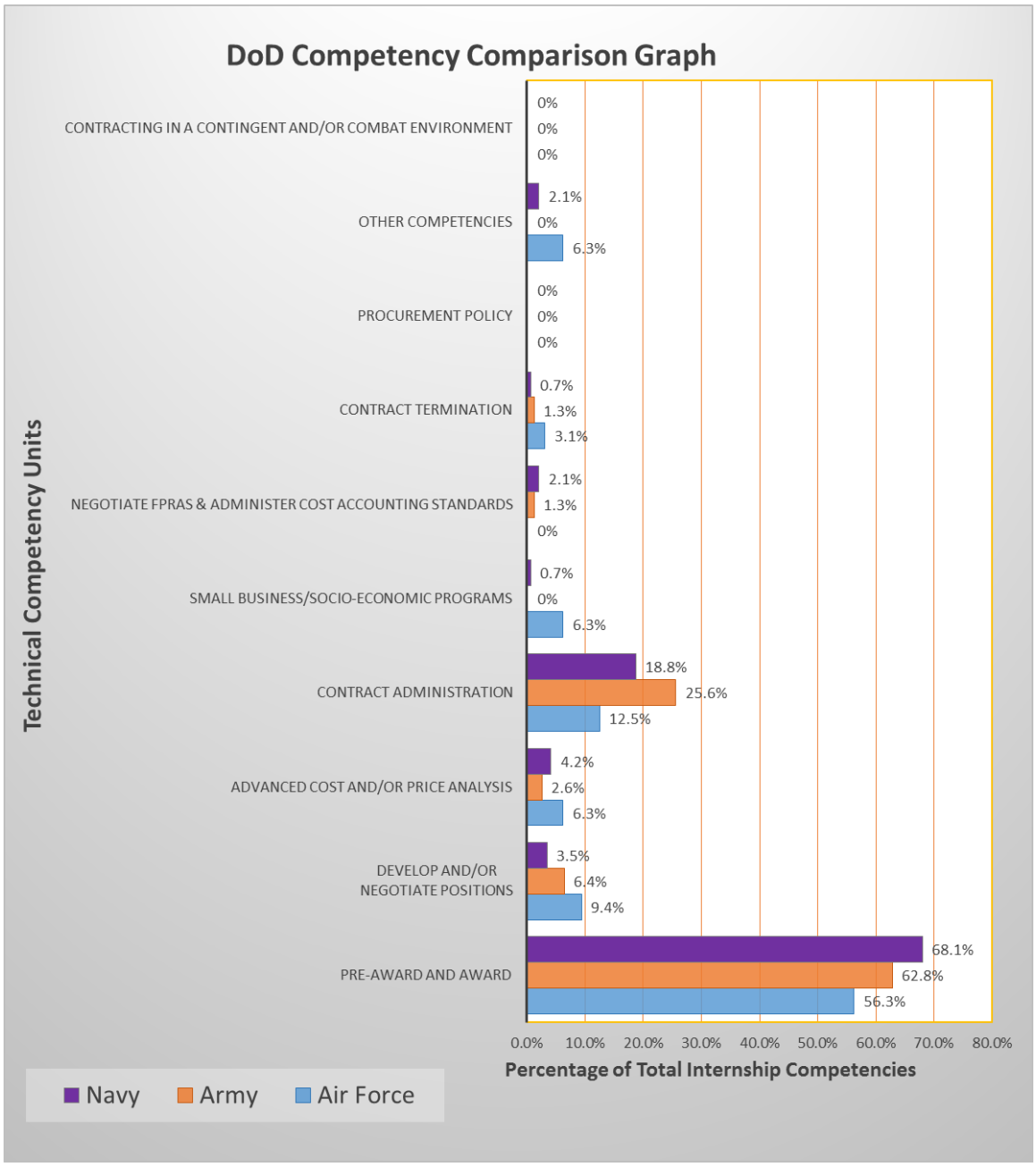


Figure 2. DoD Competency Comparison Graph

APPENDIX J. RATING ASSESSMENT SCALE

RATING	ASSESSMENT *(Degree of Best Practice Implementation)*
4	**Full Implementation** – Four of more paragraphs found in reference material regarding the assessment category
3	**Effective Implementation** – Three paragraphs found in reference material regarding the assessment category
2	**Partial Implementation** – One to two paragraphs found in reference material regarding the assessment category
1	**Ineffective Implementation** – Passing reference, mention of, or isolated usage found in reference material regarding the assessment category
0	**No Implementation** – No evidence found in reference material regarding the assessment category

Table 9. Rating Assessment Scale

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APPENDIX K. INHERENT CHARACTERISTICS

Inherent Characteristics	Assessment Category	Industry Best Practice
Federal Employee Benefits	Compensation and Benefits	Offer Interns Compensation and Beneficial Incentives
Federal Employee Benefits	Flexible Work Schedules	Offer Flexible, Part-Time or Compressed Work Schedules
Position Description	Position Description	Write a Position Description
DAWIA Certification	Training and Development Plan	Write a Training and Development Plan
Promotions	Not included as an assessment category	Offer Interns Compensation and Beneficial Incentives

Inherent Characteristics

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APPENDIX L. BEST PRACTICE COMPARISON CHART

	18 Best Practices/ Assessment Categories	AIR FORCE		ARMY		NAVY	
		Rating	Assessment Rationale Reference	Rating	Assessment Rationale Reference	Rating	Assessment Rationale Reference
1	Structure and Funding	4	Chpt IV, C,4(b)	4	Chpt IV, C,4(b)	4	Chpt IV, C,4(b)
2	Executive/Staff Involvement	4	Chpt IV, C,4(c)	4	Chpt IV, C,4(c)	4	Chpt IV, C,4(c)
3	Position Descriptions	4	Appendix K	4	Appendix K	4	Appendix K
4	Training and Development Plan	4	Appendix K	4	Appendix K	4	Appendix K
5	Tasks Related to Learning Objectives	4	Chpt IV, C,4(d)	4	Chpt IV, C,4(d)	4	Chpt IV, C,4(d)
6	Internship Coordination	4	Chpt IV, C,4(e)	4	Chpt IV, C,4(e)	4	Chpt IV, C,4(e)
7	Intern Supervision	4	Chpt IV, C,4(f)	4	Chpt IV, C,4(f)	4	Chpt IV, C,4(f)
8	Compensation and Benefits*	4	Appendix K	4	Appendix K	4	Appendix K
9	Skills-Building Opportunities	4	Chpt IV, C,4(d)	4	Chpt IV, C,4(d)	4	Chpt IV, C,4(d)
10	Flexible Work Schedules*	4	Appendix K	4	Appendix K	4	Appendix K
11	Performance Feedback	4	Chpt IV, C,4(g)	4	Chpt IV, C,4(g)	4	Chpt IV, C,4(g)
12	Ending the Internship	4	Chpt IV, C,4(h)	4	Chpt IV, C,4(h)	4	Chpt IV, C,4(h)
13	Orientation/Onboarding	4	Chpt IV, C,5(a)(i)	4	Chpt IV, C,5(b)(i)	4	Chpt IV, C,5(c)(i)
14	Mentoring	1	Chpt IV, C,5(a)(ii)	4	Chpt IV, C,5(b)(ii)	2	Chpt IV, C,5(c)(ii)
15	Rotational Opportunities	2	Chpt IV, C,5(a)(iii)	4	Chpt IV, C,5(b)(iii)	4	Chpt IV, C,5(c)(iii)
16	Relocation Assistance	1	Chpt IV, C,5(a)(iv)	1	Chpt IV, C,5(b)(iv)	1	Chpt IV, C,5(c)(iv)
17	Intern Communication Methods	0	Chpt IV, C,5(a)(v)	0	Chpt IV, C,5(b)(v)	4	Chpt IV, C,5(c)(v)
18	Showcasing Intern Work	0	Chpt IV, C,5(a)(vi)	0	Chpt IV, C,5(b)(vi)	3	Chpt IV, C,5(c)(vi)
	TOTAL	**56**		**61**		**66**	
Implementation Rate		**78%**		**85%**		**92%**	

Table 11. Best Practice Comparison Chart

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